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# AIRLIFT AND ACCESS IN THE INDO-PACIFIC

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## **APPROVAL**

The undersigned certify this thesis meets masters-level standards of research, argumentation, and expression.

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## **DISCLAIMER**

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the United States government, Department of Defense, the United States Air Force, or Air University.



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## ABSTRACT

The presence of five nuclear powers, one third of the world's trade, and many cross-national threats to security--among other complex and growing tensions--draw the US into the Indo-Pacific. The US needs physical access to the Indo-Pacific in order to influence the actions of regional states if it is to continue to lead the international order. In response to the presidential directive to pivot attention towards Asia, tensions within the Indian and Pacific Oceans led the development of AirSea Battle – the military plan for engagement in Asia. Airpower is the key component of the AirSea Battle concept relying on kinetic force for access. Concerns over the strategic language and force employment of AirSea Battle have placed relationships within the Indo-Pacific on an unsure footing. Compellence, incentive, and cooperation are three basic methods of gaining access in the Indo-Pacific. The major concepts from three access cases studies also reveal unique characteristics within each access method. Traditionally, airlift serves a supporting role to kinetic force either in the facilitation of force deployments or in fulfilling a military operation's costly logistic requirements. Airlift can also be used proactively to shape and influence regional geopolitical environments with reduced costs and therefore has importance beyond the logistic and support paradigm. Airlift *is* currently gaining access to strategically significant Indo-Pacific states. Leveraging non-kinetic airpower capabilities to gain access and exert US influence represent *first-option* alternatives. If AirSea Battle's use of kinetic force represents one method of access, then the intent of this thesis is to demonstrate that airlift presents alternatives supporting US national security interests. The US should leverage its asymmetric airlift capabilities to gain access and shape relationships in lieu of kinetic airpower.



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## INTRODUCTION

### **Airpower and the Indo-Pacific**

In 2009, the President of the United States declared an intention to pivot attention towards the Pacific based on the rising link between the Asian-Pacific region and the future of US prosperity and security.<sup>1</sup> The President continues with language about the importance of Asia and the Pacific and has now expanded his vision to include the Indian Ocean. To influence a region that does not share the close cultural and historic ties it has with Europe, the US needs one thing above all others: access. Access to the region affects relationships with states with which the US desires longstanding security commitments. This thesis compares the relative merits of compellent, incentive, and cooperative approaches to gain and sustain access. In the Indo-Pacific, airlift serves a supporting role for the first approach. Airlift is the reason the second and third approaches are both desirable and executable.

Compellence methods of gaining access use or threaten the use of, force. Incentive methods of gaining access involve an exchange or bargain. Cooperation methods of gaining access appeal to mutual interests through compromise. Where compellence seeks control, incentive access seeks benefit, and cooperation seeks shared interests. In the Indo-Pacific, the US seeks all three: control, benefit, and shared interests. However, regional tensions, power dynamics, and unknown intentions require a multi-faceted approach. Access to some areas of the Indo-Pacific is diminishing with the proliferation of denial weapons and new territorial claims affecting state borders, fly-over rights, and transit along sea lines of communication. Access to other areas is increasing through diplomatic and economic relationships. In a geopolitical environment where access is shifting, the current trends require US offsetting actions to prevent the Indo-Pacific from becoming both unfavorable and unstable in the following decades.<sup>2</sup> The chosen access methods must benefit the US and provide stability to the Indo-Pacific region.

Land, sea, and air components have wrestled with the dilemma of gaining access in the Indo-Pacific even before rebalancing discussions began.<sup>3</sup> The Indo-Pacific's *tyranny of distance*

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<sup>1</sup> Mr. Michael Lumpkin, acting undersecretary of defense for policy, House Armed Services Committee Holds Hearing on the Asia-Pacific Region Rebalance, CQ CONGRESSIONAL TRANSCRIPTS, Congressional Hearings Jan. 28, 2014.

<sup>2</sup> Jan Van Tol, et al., "AirSea Battle: A Point-of-Departure Operational Concept," Center for Strategic and Budgetary Assessments. 2010, x.

<sup>3</sup> The Pacific Pivot has undergone several changes in terminology since 2006. The current term, rebalance, seeks to encompass both European and Asian imperatives.

– an area representing roughly five times the width of the US – challenges naval and ground force mobility. Aside from force mobility and deployment challenges, the perception of *combat-ready* forces risks souring the attitudes of regional states toward a US presence. Responses from US military services include calls for more materiel and funding for capabilities. Land power advocates warn that many forget the deterrent value of forward deployed troops and equipment. Sea power advocates stress the need for a contested landing capability augmented with standoff weapons. Airpower advocates call for more kinetic capabilities to overcome anti-access and area denial technology. Land, sea, and air components currently lack the equipment, personnel, or both to conduct such operations. A lack of resources makes executing these alternatives difficult if not impossible, in the near term.

When considering access, the first images called to mind are often kinetic: direct attack, precision engagement, and overwhelming force. According to RAND analyst Benjamin Lambeth, airpower is the weapon of choice under these circumstances. The large and highly advanced fighter, bomber, and tanker fleets underwrite the rapid concentration of force – one of airpower’s hallmarks. US asymmetric advantages in battle space awareness and standoff precision strike capability allow power projection without simultaneously projecting US vulnerabilities.<sup>4</sup> However, we rarely look to airpower for access in a time when access is most crucial – during the peace.

Despite its attractiveness under certain conditions, kinetic airpower can potentially undermine efforts to gain access in the Indo-Pacific rather than facilitating access through efforts to influence relationships in a positive manner. The true intent of this work is to broaden the aperture of airpower discussions and political leveraging – airpower in the form of airlift has more utility than previously believed. This project explores a tangent from the kinetic options currently discussed that require more forces than the US has at present and will have in the near future. Airlift’s non-kinetic capabilities have something unique to offer decision-makers seeking access for influence in the Indo-Pacific. As a seminal feat, the Berlin Airlift illuminated several important aspects of airpower, warranting further examination in current and future strategic environments. Although airlift often supports kinetic operations, it also has capabilities that go

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<sup>4</sup> Benjamin S. Lambeth, “AirLand Reversal: Airpower Has Eclipsed Land Power as the Primary Means of Destroying Enemy Forces.” *Air Force Magazine*. February, 2014.

beyond kinetic. This work argues that airlift can serve as a stand-alone capability and offer unique, non-kinetic options for decision-makers to support US efforts to gain access.

The intent of this work is to cause a paradigm shift in thinking about airlift; from a supporting role used reactively in the deployment of assets and materiel to a proactive role forging civil-military ties to achieve access by leveraging the US's vast and unmatched airlift capability. This thesis offers an alternative to forced entry operations and proposes bargaining with airlift capabilities to offer a competitive advantage to regional partners in exchange for access to runways.

This thesis will show airlift has many unique facets supporting US efforts to gain access and therefore warrants strategic consideration as a policy tool. Airlift used to acquire regional access represents a valuable, additional option to influence the Indo-Pacific region by using its non-kinetic capabilities. Humanitarian assistance, disaster response, medical evacuation, aerial resupply, and logistics support are unique capabilities of airlift that can be leveraged to states in return for access. Furthermore, these operations conducted by the US broadcast a message of influence throughout the Indo-Pacific. The ease of dispersion and concentration, light footprint, and non-kinetic nature of airlift also makes a US presence less risky for reluctant host states and more enticing for states seeking build stronger alliances to counter China. A strategic approach for using airlift as an access tool is necessary for leveraging its capabilities to exert influence.

### **The Significance of Access**

The current geopolitical environment in the Indo-Pacific creates challenges for both access and influence. The National Security Strategy notes a world in change and reiterates the US intention to lead the international order.<sup>5</sup> To do so, the US must create new and strengthen existing relationships, particularly in the Indo-Pacific region. Leadership, however, requires both influence and access.

The fortunes and security of the US draw links to the Indo-Pacific. Michael Lumpkin, the acting undersecretary of defense for policy testified that:

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<sup>5</sup> Sustaining U.S. Global Leadership: Priorities for the 21<sup>st</sup> Century Defense, 2.

one-third of global trade, including \$1.4 trillion in two-way trade annually with the United States, is with Asia. Half of the world's shipping by tonnage passes through the waters of the South China Sea. As countries and people throughout the region become more prosperous, it's ever more important to the global economy, the United States will be an active partner in the region's growth. Rebalance also reflects strong and long-standing ties between the United States and the countries of the Asia-Pacific, where the United States has long supported security and stability with our military presence and partnerships. I want to emphasize that the Department of Defense's role in the rebalance is only part of the broader U.S. government effort that also includes our diplomatic, social, culture -- cultural, political, and trade initiatives. The Defense Department contributes to the administration's aim of a secure and prosperous Asia-Pacific through -- by primary lines of effort: transforming and modernizing alliance and partnerships, enhancing our defense posture in the region, updating operational concepts and plans, investing in the capabilities we need to secure our interests throughout the region, and finally, strengthening multilateral cooperation and engagement.<sup>6</sup>

Initially described as a pivot to the Pacific, regional dynamics also tie the Indian Ocean into America's Asian-Pacific concerns. The focus on the Indo-Pacific region highlights the growing importance of a regional US presence that facilitates diplomatic, social, cultural, political, and trade initiatives that allow contribution to America's continued prosperity.

The growth of China and India as regional hegemons create security concerns for America. China and India have had border disputes resulting in armed conflict.<sup>7</sup> Their opposed ideologies and historic fault lines have resulted in military build-ups and destabilizing postures throughout the region.<sup>8</sup> There is also tension between China and Japan. Historic disputes,

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<sup>6</sup> Mr. Michael Lumpkin, House Armed Services Committee Hearing, January 27, 2014.

<sup>7</sup> For more information on India's war with China and the history leading up to this conflict, see Neville Maxwell, *India's China War*.

<sup>8</sup> For more information on the ideological and historic tensions between China and India, see Egretreau, Renaud. "The China-India Rivalry Reconceptualized."

opposing ideologies, and intense regional and global competition threaten stability and economies. Many smaller Indo-Pacific states must unwillingly submit to Chinese pressures to access markets and consumers for their products or face further economic struggles. In addition to the fault lines between states, transnational threats including terrorism, crime, and drug trafficking threaten stability. Disruptions in this area have reverberations throughout the US economy and impact US national security. Access within the Indo-Pacific creates opportunities for the US to build beneficial relationships and form alliances protecting US interests.

Accordingly, the National Security Strategy reflects US military guidance on enduring national security interests.<sup>9</sup> These interests are:

- The security of the United States, its citizens, and U.S. allies and partners;
- A strong, innovative, and growing U.S. economy in an open international economic system that promotes opportunity and prosperity;
- Respect for universal values at home and around the world; and
- An international order advanced by U.S. leadership that promotes peace, security, and opportunity through stronger cooperation to meet global challenges.<sup>10</sup>

The National Security Strategy further states the US seeks expanded military cooperation with India and will monitor China's military modernization program and prepare accordingly to insure US interests and allies, regionally and globally, are not negatively affected.<sup>11</sup>

The broader importance of the Indo-Pacific region is recognition of the rise of India as a regional power. While Cold War divisions separating the Middle East, the Indian Subcontinent, and the Pacific Rim have faded, energy, trade, and security concerns are bringing states within these regions in contact with one another.<sup>12</sup> Expanding the study of access from a Pacific- or Asian-centric approach to a broader Indo-Pacific approach is more appropriate in terms of discussing the relationships within this region while increasing opportunities for strategic

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<sup>9</sup> 2011 National Military Strategy, 1.

<sup>10</sup> 2011 National Military Strategy, 4.

<sup>11</sup> 2011 National Military Strategy, 14.

<sup>12</sup> Egretreau, Renaud. "The China-India Rivalry Reconceptualized." *Asian Journal of Political Science* Vol 20, no. 1 (April 2012), 7.

access.<sup>13</sup> These opportunities are only available if the US has more capabilities with which to pursue access.

America faces numerous domestic and international barriers to its efforts to gain access to the Indo-Pacific region. Fiscal constraints on available material and equipment, political considerations affecting force size and composition, and the location of access operation are only a few of these limitations. The domestic political environment presents other barriers to US forces overseas. The US must maintain a delicate balance and discern the appropriate level of access to assuage domestic political concerns while not upsetting Indo-Pacific states through intimidation or perceived belligerence.

In addition to the political challenges mentioned in the previous paragraph, US access faces other barriers. International barriers to access present several challenges – barriers relevant to kinetic access in particular. The proliferation of anti-access weapons, strategic messaging associated with the presence of US military forces, encroachment on sovereign and disputed territories, and the perception of Western presence as interference are only some of the barriers to access. It is easy to understand Chinese concerns that US interest in the Indo-Pacific is an attempt at encirclement by military forces throughout the region.<sup>14</sup> The consequence of anti-access and area denial weapons proliferation could result in an arms race where each state, from fearing vulnerability, strengthens its military force in a cascading and propagating fashion throughout the region. The risk of an arms race in the Indo-Pacific, amidst current tensions and fractal histories is real.

Access has another benefit in addition to establishing relationships; it increases the cost of entry for competitors. The economic principle of the first-mover advantage is roughly analogous to proactive access. Where the first mover advantage seeks to set advantageous conditions, proactive access seeks to establish advantageous relationships. According to economists Prescott and Visscher, the first-mover advantage to claiming a geographic area provides the resources needed to thrive.<sup>15</sup> If access and the consequent relationships succeed, then the cost of entry to other states would be too great.

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<sup>13</sup> Mr. Michael Lumpkin, House Armed Services Committee Hearing, January 28, 2014.

<sup>14</sup> For more information on the proposed deployment of forces throughout the Indo-Pacific to include approximate troop levels and locations, see Daggett, et al., 7.

<sup>15</sup> Edward C. Prescott and Michael Visscher. “Sequential Location Among Firms with Foresight,” *Bell Journal of Economics*, Vol. 8, No. 2. Autumn, 1977, 391.



The economic principle of access through first-mover advantage also speaks to influence. When a state establishes strategic access, it can expand control by establishing its own barriers to entry through either diplomatic relations, physical barriers around its access points such as sea or airports, or economic ties that secure significant portions of trade. These relationships bind states together and allow influence over both time and territory.<sup>16</sup> Proactive access sets many of the conditions that reactive access must overcome. Reactive access leaves force as the only resort instead of the last resort. The ideal form of access communicates US resolve to maintain stability without the threat or use of force.

A thorough discussion of the first-mover principle and proactive access methods later in this work considers advantages and disadvantages. Proactive access is less costly because reactive access is often contested. The mere presence of an anti-access environment with other significant barriers should not predispose the US to kinetic force. Despite the anti-access environment present in some areas throughout the Indo-Pacific, there are a myriad of opportunities for access gained through non-kinetic means during times of peace.

The access case studies presented herein reveal several key elements. Each method of access has accompanying costs. If the currency of compellence access is force, the currency of incentive and cooperative access are compromise and mutual interest. With compellence, the cost of maintain access unpredictably increases over time as shown through Britain's use of naval power during the 19<sup>th</sup> century. Conversely, maintaining incentive access remains relatively the same. Lastly, the cost of maintaining cooperative access decreases over time. When coupled with the first-mover's advantage and the increased cost for newly entering competitors, cooperative access methods present the largest return on investment.

Restricting access is not a novel idea and anti-access and area denial are age-old problems, but the US must not blindly rely on kinetic solutions. When military planners discuss access the Indo-Pacific, the discussion typically turns to force-on-force projections and conflict estimations. Airlift, as conceptualized in this thesis, provides an alternative approach. Used as a tool for access, airlift can provide a more broadly applicable solution to gain access than the use

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<sup>16</sup> Although the authors talk about firms' entry into new markets and the consequent effect on competition and entry costs, the same principles relate to strategic access. For more information, see Prescott and Visscher, 378–393.



of kinetic force because it provides the US with options well-before conflict starts – it potentially allows the US to eclipse a would-be conflict.

### **The Joint Operational Access Concept and the Use of Force**

The concept of engagement within the sovereignty concerns and contested environments of the Indo-Pacific quickly equated operational access and military force. The Joint Operational Access Concept was created to address the challenges in this region.<sup>17</sup> Unfortunately, the conceptual result – AirSea Battle – creates more challenges than solutions and its theoretical framing leaves force as the only resort instead of the last. The Joint Operational Access Concept's explanation of AirSea Battle offers anti-access and area denial forces in the Indo-Pacific as cause for armed confrontation. Framing the Indo-Pacific in this manner predisposes the use of force in a region where conflict is both unwanted and counterproductive and plans for an inevitable crisis without viable alternatives that create access, enable influence, and maintain stability. In many ways, the Joint Operational Access Concept undermines the very national interests it is designed to protect and communicates an adversarial tone to states within that region.

AirSea Battle offers several precepts forming the foundation for operations designed to attack the entirety of an adversary's anti-access and area denial defenses, not just those on the perimeter.<sup>18</sup> Among other challenges, the concept lists the possibility of significant losses attempting precision strikes trying to achieve access that is neither logistically supportable nor economically feasible.<sup>19</sup> Faced with this reality, the US must choose; either cultivate this capability or look for different options to exert influence in the Indo-Pacific. While efforts to train and resource for this capability are important, preparing to use kinetic force in the Indo-Pacific may contribute to the instability of this region while neglecting a vital airpower component in airlift.

Current US Army, Navy, and Air Force concepts of AirSea Battle involve force and the extensive use of international waters and airspace, non-sovereign cyberspace, space, and the

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<sup>17</sup> United States Department of Defense Joint Operational Access Concept. January 17, 2012.. i-ii.

<sup>18</sup> Joint Operational Access Concept, 38.

<sup>19</sup> Joint Operational Access Concept, 37.

electromagnetic spectrum.<sup>20</sup> Joint forces, according to the concept, may be largely devoted to gaining and maintaining operational access to the detriment of all other considerations during warfare.<sup>21</sup> The current environment in the Indo-Pacific makes the use of force not only self-defeating but also counter-productive to US influence efforts. Many states in the Indo-Pacific have as much fear of a strong, belligerent China as they have apprehension of a large US presence. Broadly interpreted, the AirSea Battle concept is a plan for attrition warfare based on a large US presence. In March 2014, Admiral Locklear, Commander of US Forces in the Pacific, expressed doubt that US forces could conduct the very amphibious operations in contested environments the AirSea Battle concept requires.<sup>22</sup> Nonetheless, the US must have a physical presence to influence behaviors in this region. Furthermore, access and physical presence must not undermine the relationships vital to US success in the Indo-Pacific.

## Definitions and Propositions

The following section represents several commonly used terms throughout this work. Their accompanying definitions provide the foundation and assumptions of the terminology used herein. The first, access, is a generic term for gaining a foothold, or more precisely, physical presence in another state's territory. The next, influence, has equally numerous meanings. For the purpose of this study, influence simply means the desire to create relationships between states and affect their behaviors. Coercion, according to Schelling, has two subdivisions: compellence and deterrence. Each seeks a different outcome. On one hand, compellence seeks to produce an action – allowing access.<sup>23</sup> On the other hand, deterrence seeks to prevent an action – blocking access or armed rebellion against a physical presence.<sup>24</sup> Both forms of coercion rely on the use or threat of force. Because access methods seek to produce an action, compellence access methods best describe efforts to using or threatening force that bends a state's will.

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<sup>20</sup> Joint Operational Access Concept, 5.

<sup>21</sup> Joint Operational Access Concept, 5.

<sup>22</sup> Gaskell, Stephanie. "Can the U.S. Military Really 'Pivot' to Asia?" *Defense One: Politics*. Accessed March 25, 2014. <http://www.defenseone.com/politics/2014/03/can-us-military-really-pivot-asia/81247/?oref=d-dontmiss>.

<sup>23</sup> Schelling, Thomas C. *Arms and Influence*. 2008 ed. The Henry L. Stimson Lectures Series. New Haven, CT: Yale University, 1966, 75.

<sup>24</sup> Schelling, *Arms and Influence*, 75.

Next, bargaining describes an exchange or, *quid pro quo* agreements where both sides must each make concessions. The term “incentive” is used to categorize bargaining behaviors and can come in the exchange of goods, material, support, or financial outlays. Incentives provide the underpinning of compromise – once an appropriate incentive is accepted, a compromise can occur. Cooperation, similarly used as a category of behavior, describes situations where bargaining exists but concessions are not required for agreement. Mutual interests and common goals provide the conditions for interaction. Where negotiation contains physical elements such as capital or promises for improvements to infrastructure, cooperation involves abstract elements. These elements include mutual defense, maintenance of alliances, and economic development.

The definitions of the three types of access methods lead to propositions that relate the expenditure of resources and capital over time. The following are propositions regarding access methods and their corresponding cost to maintain each of the three types of access.

**Proposition 1: The costs of maintaining access through compellence are unpredictable and rise over time.** Compellence methods require force or the threat of force to create access. Next, to maintain access, deterrence is required to prevent a state or adversary from taking action to block or prevent access once achieved. The relationships within this access method are adversarial, at least at first, and feature a dominant state acting on or overtaking a weaker state for successful access.

**Proposition 2: The costs of maintaining incentivized access hold relatively constant over time.** Access from incentives requires appropriate concessions. Up-front agreement on concessions results in compromise, an exchange offer for access. The relationships within this access method are conditional on the incentives and the compromise created and, more importantly, sustained through continued incentives.

**Proposition 3: The cost of maintaining cooperative access methods decreases over time.** Access from cooperative focuses less on the access itself and more on the mutual interests resulting in a physical presence. Cooperative access focuses on the common benefit from the physical presence, opening access where appropriate to meet common objectives according to the relationship. The

relationships within this access method more closely resemble alliances and collaboration.

Access methods do not exist as singular phenomenon throughout time. Instead, one type of access method may provide the conditions necessary for another's use. Another method of maintaining or sustaining access at some later period may eclipse the initial method of gaining initial access. Theory explains the characteristics of change from the initial method of gaining access to a different method of maintaining access and the case studies reveal specific examples.

### **Airlift Supports Access**

Inasmuch as the case studies show access methods at work, access can be equally effectively gained by compellence, bargaining, and cooperation. Noting a distinction between the cost of reactive and proactive access methods, airlift supports all access methods. Reactive airlift complements compellence methods while proactive airlift catalyzes incentivizing and cooperating access methods into viable alternatives. Historically, airlift capacity has reactively supported kinetic force; either pre-positioning that force or supporting it once in place. However, airlift aircraft can provide effects strike aircraft cannot and increases the number of optional available to decision-makers.

Non-kinetic airpower can play a vital role in supporting US efforts to gain access to strategically significant states in the Indo-Pacific in order to permit US influence. Although much of the Indo-Pacific is water, maritime travel requires days and weeks. Additionally, many of the states in the Indo-Pacific harbor strong opposition to US ground force, nearby aircraft carriers, and forward deployed warplanes. For this reason, airlift aircraft are ideally suited to navigate the political and geographic challenges of the Indo-Pacific given their nonthreatening nature and ease of concentration and dispersal.

Accordingly, the paradigm of gaining access must be changed from views on the use of kinetic force against an adversary's denial structures to the use of an advantage only the US possesses in the degree and magnitude of capability – airlift. US airlift capability has delivered supplies and humanitarian assistance to the most inhospitable locations on all seven continents in an unmatched manner. Airlift aircraft are less imposing than strike aircraft and less restricted in operations throughout the world. US airlift aircraft land at airfields throughout the world, in

places like Beijing, Hong Kong, Singapore, and Hanoi, and routinely travel to areas where fighter, bomber and unmanned aircraft systems risk confiscation upon landing, or worse. Simply stated, airlift aircraft can land and fly over countries where strike aircraft cannot. This benign quality can aid access efforts because airlift represents a less threatening force component while supporting the initial constructs of force projection.

Certainly, one must be aware of the presence of nuclear weapons, aircraft carriers, submarines, and strike aircraft when considering the military capabilities of a state – their proverbial stick. If lethal weapons constitute a “big stick”, then using airlift allows the US to “walk softly.” Airlift is non-lethal and has non-escalatory characteristics that produces a different geopolitical environment that lethal force. In this manner, of airlift gives the US a unique, competitive bargaining advantage to improve its position. As a superpower, the US need not perilously continue down the road toward the military force against another adversary. Instead, the US could use airlift to avoid direct conflict while still accomplishing the objective of gaining access to influence strategic outcomes. Bargaining theory helps explain a US competitive advantage achieved using airlift in exchange for access.

Airlift provides much of the groundwork for developing access points to support potential US influence efforts. The innocuous nature of airlift offers a unique advantage in developing soft power throughout the Indo-Pacific. The presence of US airlift aircraft operating in the Indo-Pacific will likely cause China less concern and carry less risk in escalation than transiting strike aircraft through these same regions. Additionally, the support structures needed for airlift operations are nearly ubiquitous with other aircraft operations. Airlift supports the three methods of gaining access to a state: forcible entry, coercion in the form of financial payments for access, or cooperative efforts requesting the capabilities of airlift. Through cooperative efforts, the capabilities of airlift can act as a bargaining tool to grant the US access to strategically important states in the Indo-Pacific.

Airlift, as an access tool, provides independent alternatives to the US while ensuring its ability to maintain and proliferate influence in the Indo-Pacific. According to a paper published by the Center for Strategic and Budgetary Assessments, the US has two choices in the Indo-Pacific. First, risk the loss of military access to areas important to its security and that of key allies and partners to whom it is committed by treaty or law. Second, explore alternatives that preserve the stable military balance that has brought a period of unparalleled peace and

prosperity.<sup>25</sup> Since AirSea Battle's concept is insufficient and airpower still plays an important role in US security interest, then airlift presents a potential alternative.

Airlift has underpinned US influence efforts from the Berlin Airlift, humanitarian assistance and disaster response airlift used in Pakistan and the Philippines, and humanitarian evacuations in Japan, Lebanon, Libya, and Syria. Many of the airlift operations this work calls for are already being done but the thinking on airlift must evolve in order to realize airlift's potential for strategic access. As an example, consider the legitimizing effects of using the vast resources of US airlift toward confronting humanitarian challenges caused by the refugee crisis in Syria instead of cruise missiles or air strikes launched against Syria as airpower's contribution to the crisis. US airlift, as a diplomatic tool, creates opportunities for the US to exert influence. To prepare for the future, airlift's non-kinetic operations should play a larger role when offering alternatives to decision-makers.



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<sup>25</sup> Jan Van Tol, et al., x.

## CHAPTER 1

### **International Relations Theory and Access**

The intent of the following chapter is to two-fold. First, several theories are put forth to explain how and why the US needs to exert influence. Secondly, an examination of theoretical evidence for and against the propositions explains their actions and reveals their consequences. Relationships and access share a cause and effect relationship. Relationships shape access. The intervening methods presented herein – compellence, incentives, and cooperation – turn relationships into access. In this light, theories explain the salient points of maintenance costs associated with these intervening methods. The chapter puts forth methods to achieve access by looking at the consequences, both positive and negative, of different strategies for exerting influence through relationships based on access.

Theories connect compellence, incentive, and cooperative access methods with the relationships and cost. International relation theories also provide a basis for the propositions set forth in this work. Both realist and liberal theories explain the creation of power differently and predict state actions to achieving it but in different ways. Both agree states use power to influence. Realism helps frame compellence and describes two primary ways states build power: create within or take it from another state. Sovereignty and power establish many of the premises for relationships between states in the realist model. Liberal theories help frame both incentive and cooperation by describing power through the influence of relationships designed to moderate behavior.

#### **Access Theories**

This study creates three categories to describe different means of access; each category can act alone or in combination with others to produce a foothold. Each access method also communicates a different intent. While the intent of a state can change over time, there are also unique aspects associated with each type of access methods. Access from invasion demonstrates intent to control. Access in exchange for fiscal or material support demonstrates a commitment for prosperity and development. Access gained by cooperation demonstrates a commitment to shared interests and common goals.



According to Gilpin, access represents a form of territorial expansion – one of the hallmarks of hegemonic change. Control of sovereign territory permits movement of personnel, equipment, and supplies freely or endeavors to restrict an adversary free movement. Control of territory in a conflict also enables follow-on operations conducted to accomplish strategic objectives. Access in exchange for fiscal or material support creates admittance where none previously existed.

Geographic access to strategically important locations allows projection in a manner not possible before. Access granted to sovereign territory allows collaborating and extends the capabilities of one state to another. Whether by force or from collaboration, physical presence demonstrates a degree of commitment that exchanges of dialogue do not. Efforts to exercise control, promote prosperity, and extend partnerships are both expressions of influence and examples of power balancing. Compelling, incentivizing, and cooperating provide access and bring influence to bear.

Theory, applied to each access method, exposes key concepts that inform the propositions. International relations theories describe the need for relationships. A state needs access to influence. In most circumstances, the relationship determines not only the type of access, but also the extent of access. Cooperative relationships produce access on more affordable scales than negative relationships with contested access. International relations theories describe the need to exert influence and offer important insights about how relationships affect access.

## **Compellence Theories**

Pure realism explains that states will take *what* they want *if* they can. For pure realists, force exists for this purpose. Realists view the need for power as an inescapable condition of the international system and define national interest in terms of power.<sup>1</sup> Compellence access methods center on the application or threat of force.<sup>2</sup> Compellence and deterrence employ the means of force to relationships to accomplish objectives. Where compellence seeks to persuade a state to take a desired action, deterrence seeks to compel a state from taking an unwanted action.

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<sup>1</sup> Hans J. Morgenthau, *Scientific Man Vs. Power Politics*. Chicago, Ill.: University of Chicago Press, 1946, 200.

<sup>2</sup> Thomas C. Schelling, *Arms and Influence*, 80.



As long as an adversarial relationship remains, force creates and maintains access. By changing the relationship and pacifying the compelled state, the cost of maintaining access can level off or even decrease. However, the following section will explain how force unpredictably changes the environment making a transition away from an adversarial relationship difficult. The increasing costs of maintaining access are then by-products of a reliance on force to address the expected efforts of the adversary to regain its previous independence.

**Proposition 1: The costs of maintaining access through compellence are unpredictable and rise over time.**

As Waltz stated, force remains the final arbiter in international affairs but not the only arbiter.<sup>3</sup> One of the primary reasons compellence methods have increasing costs over time relates to the acts employed to gain and sustain this type of access by the aggressing state on the targeted state. Compellence is the most difficult part of coercion because it must successfully communicate a credible threat while not inciting resistance.<sup>4</sup> The use of force for compellence comes at a price because force sends complex messages. Ideally, force is the last resort when all other measures fail. Realistically, the use of force is often coincident with a state's dominant instrument of power.<sup>5</sup>

While the application of force to gain access may be limited at first, an occupying force draws in peripheral actors that might then expand the conflict.<sup>6</sup> The threat or use of force rarely moderates behavior as in the Korean War and the relative moderation of North Korea's lack of force against South Korea since the armistice.<sup>7</sup> Most often, force causes unintended escalatory responses from other states or groups. The two main factors influencing the cost of maintaining access after compellence are deterrence efforts and peripheral actors.

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<sup>3</sup> Kenneth Waltz, *Theory of International Politics*, 180.

<sup>4</sup> Thomas C. Schelling, *Arms and Influence*, 100.

<sup>5</sup> Kenneth N. Waltz, *Theory of International Politics*, 187.

<sup>6</sup> Emile Simpson. *War from the Ground Up: Twenty-First Century Combat as Politics. Crises in World Politics*. New York: Columbia University Press, 2012, 241-244.

<sup>7</sup> While the use of force during the Korean War has prevented North Korea from re-initiating a war with South Korea, upon closer inspection, the example misses the fact that the threat of force has been costly since the armistice in 1953. It also does not fully capture the violent acts that have occurred during the armistice. Furthermore, access was not maintained in this instance, as North Korea is one of the most closed-off states in the world.

First, successful compellence methods have an inseparable aspect of deterrence in order to maintain access. If compellence threatens to punish disobedience with violence, then deterrence threatens lack of obedience with further violence.<sup>8</sup> The compelled state must believe resistance is not sensible. Where resistance is possible, it will be likely.<sup>9</sup> Notwithstanding the initial use of force to defeat armed defenses and gain contested access, maintaining access requires preventing future defiance. When compellence leads to defiance, compelled states look for resistance methods employing any use of retaliatory force against invasion and occupation.

Deterrence must prevent such uprisings not only in the target state but also among peripheral states seeking involvement. These outside states or groups look for opportunities to exploit vulnerabilities in a powerful state that misuses force or is unsuccessful in compellence.<sup>10</sup> Compellence is the initial step toward access; maintaining it through deterrence is another and may require larger amounts of force.

Second, the force used to create obedience is insufficient to maintain obedience as peripheral actors enter the conflict. Compellence starts a sequence of continuous force; first to open access, then to protect the gains made; both of which lead to escalating costs. Protecting gains against growing opposition requires greater use of force since control *of* a territory does exercise control *within* it more force is needed to provide security for influence operations against a growing threat.<sup>11</sup> Exercising control within a territory requires pacification and a myriad of other actions to include policing and law enforcement, and establishing or rebuilding civic structures and public works. Each of these actions carries a cost the compelling state must bear when transitioning away from compellence.

Jervis warned that, in addition to exercising control within a territory, there are dangers from peripheral actors believing a great power is vulnerable.<sup>12</sup> Vulnerability draws in outside actors seeking to exploit an advantage or establish legitimacy themselves. Outside actors can exacerbate pacification efforts. Waltz appropriately cautions that military forces alone are insufficient at pacification tasks and even more so in states with disaggregated or politically

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<sup>8</sup> Thomas C. Schelling, *Arms and Influence*, 69-73, and Emile Simpson, 241-44.

<sup>9</sup> Thomas C. Schelling, *The Strategy of Conflict*, 21.

<sup>10</sup> Robert Jervis, *Perception and Misperception in International Politics* (Princeton, N.J.: Princeton University Press, 1976), 58.

<sup>11</sup> Kenneth N. Waltz, *Theory of International Politics*, 187.

<sup>12</sup> Robert Jervis, 58.

energized populations.<sup>13</sup> Pacification becomes more complex when nationality links populations to broader regions. In this manner, localized resistance quickly spreads to regional resistance. Force, then, is only a component of a larger effort needed to address pacification. This larger effort may require civic institutions concentrating on the needs of a population. In this regard, force changes the conflict environment and increases costs in increasing and unpredictable ways.

The spiral model captures both the effects of threats in states and the danger of peripheral actors. The spiral model predicts that as security concerns increase, states will move to protect themselves.<sup>14</sup> Fearing vulnerability, states increase the cost of another state using force by increasing their defenses and strengthening their security. Defensive build-ups misperceived as offensive preparations in one state cause a corresponding build-up in others.

Force does not end spiraling actions – it intensifies them. The use of force can set off a network of events causing expanding resistance while drawing in outside actors. Peripheral states may aid the compelled state or build-up force so they too do not face a similar fate. From the single act of threatening force, states adopt reactionary and aggressive postures. If successful resistance is possible, then resistance is likely.<sup>15</sup> Resistance, in the form of escalating violence, makes relationship change difficult for both states. This is because moderation and conciliation in response to resistance can relay weakness and invite further aggression.<sup>16</sup>

Compellence for access may have initial success but may also create resentment or may reveal weaknesses leading to long-term challenges and rebellion. Just as a state that refrains from applying force may betray its weaknesses, so the state that has trouble exercising control may display the defectiveness of its power.<sup>17</sup> When a strong state seeks access against a weak state, the use of force can be enticing. Many of the long-term challenges and consequent rebellion are uniquely associated with force.

The first proposition's cost assertion becomes reasonably clear. Maintaining access in an adversarial relationship requires expansive force to prevent resurgent uprisings while also dissuading retaliation from peripheral actors. Jervis argued that force creates opportunities for misperception among states. The continuous reliance on force and its potential misperceptions

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<sup>13</sup> Kenneth N. Waltz, *Theory of International Politics*, 189.

<sup>14</sup> Robert Jervis, 64.

<sup>15</sup> Robert Jervis, 58.

<sup>16</sup> Robert Jervis, 59.

<sup>17</sup> Kenneth N. Waltz, *Theory of International Politics*, 188.

create incalculable changes in the conflict environment making it difficult to predict how compelled states will respond. Deterrence must address growing resistance while also providing security for the influence operations requiring access in the first place. The primary risk with compellence access is the use of more resources devoted to maintaining access than influencing long-term moderate behavior.

## Incentive Theories

Where either existing or future relationships make the use of force inappropriate, incentive access offers a method for influence. Separate from the use or threat of force, incentive access persuades a state to open territory with tangible rewards. Incentives work because of their appealing and transformative aspects. Incentives have a persuasive power that changes behaviors. This persuasive power moves states by the prestige of being ingratiated with offers in addition to the substance of those offers.<sup>18</sup> Incentives get them to the table – the time at the table interacting with one another is what really changes them.<sup>19</sup> Although incentives may include financial or other support, the act of offering incentives, of negotiating, changes the circumstances of relationships.

Where one state offers payment to another for access, the buyer may be able to offset upfront costs with gained benefits from access.<sup>20</sup> Sustaining access must not cost more than the benefits gained – otherwise, the initial access is a self-defeating endeavor. Incentive access methods seek access by holding an offer as a substitute for maintaining a current position using conference, discussion, compromise, or all three. Compromise, persuasion, and incentives involve *quid pro quo* agreements – money, arms, defense assurances, or other support in exchange for access.

Initially, incentive methods of access are in flux and require a dialogue – they require negotiation. Negotiating starts with an idea that one actor has something the other wants and vice versa – something that is, in some regard, mutually exclusive. The distance between the two desires represents a spectrum – how well the incentives appeal to an actor. Compromise depends

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<sup>18</sup> Robert M. Axelrod, *The Evolution of Cooperation* (New York: Basic Books, 1984), 206-207.

<sup>19</sup> Alexander Wendt, *Cambridge Studies in International Relations*, vol. 67, *Social Theory of International Politics* (Cambridge, U.K.: Cambridge University Press, 1999), 309.

<sup>20</sup> Michael Parkin, *Economics* 6th ed. Vol. 1. *Addison-Wesley Series in Economics* (Boston: Addison Wesley, 2003), 197.

on what each side brings to the negotiation and the perceived value of the desired objective. In terms of access – one state offers strategic position to the highest bidder. Where the value of access creates disparate benefits for one state, incentives are a method of balancing relative gains with compensation. As long as adequate incentives continue, access continues.

Incentives give states additional options to power balance against rival states without using force. Balance of power theory suggests states will act in their best interests to preserve their status in the international system.<sup>21</sup> When threatened, a state has two options: balance against a rival through external alliances or maximize internal security. Maximizing internal security is both expensive and can potentially send a message of offensive preparations – one that is at odds with the defensive nature of maximizing security. Alternatively, external alliances increase security to balance against a rival and costs less. In reality, states do combinations of both to maximize security and dissuade a rival. Incentives are a method for states to shape the international system in their favor.

If balance of power theory suggests states maximize their security to maintain their position, hegemonic stability theory suggests conditions for their rise and fall. Hegemonic stability theory, according to Gilpin, has several assumptions. The theory asserts that states within the international system will not attempt to change the relationships within it until there is reasonable certainty they will be successful. If a perceived weakness exists in a strong state, or an opportunity exists to establish more advantageous terms within relationships to other states, a state will act to change the international system. Gilpin observed that a revisionist state seeks change through territorial, political, or economic expansion.<sup>22</sup>

If the relative (or perceived) surplus of increased political might or economic power catalyzed the change, then its deficiency also represents the limits of that change. States will try to improve their order within the international system until their efforts are no longer sustainable. The new environment reflects the revisionist state's ability to support a new status quo. At varying levels, the international system is in constant flux as states seek to maintain a balance between their national interests and the ability to support their people.

**Proposition 2: Incentivized access sustains consistent costs over time.**

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<sup>21</sup> Kenneth Waltz, *Theory of International Politics*, 126.

<sup>22</sup> Robert Gilpin, 10.

The second proposition's cost assertion relies on successfully negotiating access and that the sustainment costs do not exceed the benefits gained or the lost opportunity from using resources elsewhere. The traditional exchange of capital does not limit these relationships. The incentives from one state must be greater than incentives offered from competitors. The longer the relationship, the stronger the cooperation. The state granting access does not have to go through the cost of bargaining with another actor and will be reluctant to change the nature of the deal for fear of souring future interactions and tainting its reputation with other actors with whom it cooperates.<sup>23</sup> For these reasons, the costs of maintaining incentivized access remain approximately the same over time.

The relative power and prestige of the state seeking access improves its ability to dictate the terms of this agreement. Because incentives often rely on payments, the state seeking access must be willing and able to make these payments. The agreement is in limbo if either state is no longer content with the incentives – one state wants more, the other offers less. Incentive access efforts include those seen in Qatar, Kuwait, United Arab Emirates, Diego Garcia, and many other places throughout the world where the US has paid for access to staging areas, strategic airfields, and seaports. Access to Prince Sultan Air Base in Saudi Arabia ended when incentives no longer satisfied both states.

Although these assumptions are, as Gilpin notes, abstractions from highly complex systems, they do help to explain recent Chinese and Indian actions. China and India are ascending regional hegemonies and see themselves as not having realized the full potential or their rightful place in the international system. If the Chinese and Indian governments are pursuing territorial, economic, and political expansion, then the US will have to resolve these expansions in order to shape the Indo-Pacific region rather than reacting afterward. Shaping the Indo-Pacific region proactively allows the US to maximize its security and prevent a potential change to the international system that would not benefit the US.

There are many ways the US can influence the Indo-Pacific and prevent changes to the international system and accommodate the rise of India and China as regional hegemonies. Incentives and cooperation efforts offer viable alternatives for access and influence amidst rising

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<sup>23</sup> Robert Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy* (Princeton, N.J.: Princeton University Press, 2005), 83, 105-106.



regional hegemons. According to hegemonic stability theory, India and China will act to usurp the US if the opportunity presents itself. A regional US presence is a step toward establishing conditions on China's rise and creating relationships that make Chinese belligerence and noncompliance self-defeating. Accelerating the pace of India's development and rise is also a way to balance against China and open India's markets to further investment from Southeastern Asian states.

### **Cooperation Access**

Cooperative methods are the third category. The concepts of cooperative methods explain partnering, and common interests in the face of risk. Cooperative methods were formally developed through game theory, introduced by John von Neumann (1944) and discussed further by John William (1954) as a view toward problems of economic theory – specifically, when the most beneficial choice is not made. Game theory is a method of analyzing this engagement or interaction.<sup>24</sup> In this interaction, a player seeks to maximize gains where each has opposing interests.<sup>25</sup> Game theory, like cooperation strategy, calculates risk over the number of interactions and can help explain some of the concerns states have when entering into cooperative agreements.

Where single interactions increase the likelihood of a participant maximizing their gains, especially to the detriment of other participants, cooperation assumes multiple interactions. Multiple interactions have two major benefits. First, they increase the likelihood of cooperation strategies to maximize overall benefits to individual participants. Second, the expectation of future interactions reduces single-turn maximization efforts – participants with a winner-take-all strategy in the first interaction risk losing everything in the second and subsequent interactions from either revenge or hedging strategies. Where single interactions contain the full risk for individual loss, multiple interactions spread that risk over the entire relationship and provide disincentive for revenge or hedging strategies.<sup>26</sup> In turn, the relationship also changes the nature of the interaction. As long as participants seek to maximize their overall benefits over multiple interactions, cooperation strategies produce the best results and help inform the third proposition.

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<sup>24</sup> JD. Williams. *The Compleat Strategyst: Being a Primer on the Theory of Games of Strategy* (New Rand ed. Santa Monica, CA: RAND, 2007), 214.

<sup>25</sup> JD. Williams, 214.

<sup>26</sup> Robert M. Axelrod, 85.

According to the third proposition, cooperative access methods have reduced maintenance costs compared to the cost of initial access. This is primarily because cooperation changes relationships. Cooperation can have binding qualities and lead participants to accept higher levels of cost and risk to preserve vital relationships. As Robert Axelrod states, cooperation increases the likelihood and importance the two parties will meet again. The expectation of future positive outcomes – the *shadow of the future* effect – shapes behaviors within the cooperative agreement. When parties reach a beneficial agreement, they will maintain the conditions surrounding it.<sup>27</sup> This perspective may help explain why weaker states are eager to collaborate with stronger states who are likely to express long-term interests. If the expectation of future engagement moderates behaviors, it can also create a dependency for the same reasons.

Cooperative methods provide access to accomplish shared goals and represent a strategic alliance whereby one state relies on another to provide needed services, resources, or both. These agreements can address security concerns in the form of collective security agreements, disease prevention and vaccination efforts, and humanitarian assistance and disaster response efforts. Service or resource set important precedents for future expectations as well. Providing assistance for vaccinations for a particular outbreak, for example, demonstrates the ability and willingness to aid partner states. The same is true for humanitarian assistance efforts and disaster response. Cooperation efforts to confront shared threats or accomplish mutual interests can create access where ideological divides may prevent it.

Cooperative access strategies can also have more legitimacy in the eyes of the international system than access strategies involving compellence and persuasion. Transnational security concerns or power balancing can grant access. There is legitimacy in both the type of access and the state seeking access to a sovereign state in exchange for a service or product. Transnational and other threats posed by terrorism, insurgencies, and crime create access options to address security concerns. Balancing against belligerent states and the threats they pose to the current international system also creates access opportunities.

In cases such as humanitarian assistance and disaster response efforts, cooperative access addresses short-term needs. A state able to provide assistance gains access to prevent unnecessary suffering or loss of life. Man-made and natural disasters provide a useful framework

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<sup>27</sup> Robert M. Axelrod, 6.



for explaining short-term access. Refugee crises, natural disasters, and immediate need for military support represent just some of the reasons for access. Typically, these efforts focus on the local or regional populations affected. The state providing assistance is also uniquely suited to the task and clearly defines its intent for aid or support. Short-term cooperative access is often the most benign and, when viewed in the totality of international institutions, represents the largest portion of successful access methods.

Cooperative efforts, such as those commonly discussed in Phase Zero operations, can involve a cross-agency approach to address mutual interests. Phase Zero operations – those operations from a host of US agencies typically associated with legitimizing governments, strengthening a sovereign state's security structures, and everything from conflict prevention to economic development.<sup>28</sup> Cooperative relationships are the primary focus of Phase Zero operations. As compellence efforts are the most expensive and have the highest degree of control, and cooperation efforts are the least expensive but afford, the lowest degree of control, then the goal of Phase Zero operations is to invest the fewest resources in a pre-crisis situation to avoid an exponentially larger expenditure later.<sup>29</sup> Phase Zero operations train host state security personnel, provide civil medical examinations and basic care, and work to provide strength and reliability to civil structures.

**Proposition 3: The cost of maintaining cooperative access methods decreases over time.**

The cost of maintaining cooperative access decreases over time because maintaining access is not the primary focus of the physical presence. This does not mean the overall costs also decrease over time. Refugee crises, humanitarian assistance and disaster response activities have hefty price tags and create lasting effects. However, the maintenance costs for access are minimal because the clear intent of access focuses on mutual benefits and common goals, not on deterrence or maintaining incentives. These relationships change the nature of future interactions and further moderate behaviors.

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<sup>28</sup> Charles F. Wald, "The Phase Zero Campaign," (*Joint Force Quarterly*, October 2006), 72.

<sup>29</sup> Charles F. Wald, 73.

## Barriers to Access

Barriers to access exist along a spectrum from physical to diplomatic to cultural. The primary basis for this study sought to address the physical barriers to access as described in the Joint Operational Access Concept. However, further research revealed the presence of a myriad of other, equally formidable barriers that warrant enumeration and additional consideration. Anti-access and area denial barriers are only the first type. Notwithstanding specific technologies and countermeasures, this section will explore the blocking role of domestic opinion, intimidation, and cultural affects as barriers to access.

Physical barriers increase both the cost of initial access and the cost of maintaining access. The Joint Operational Access Concept draws attention to proliferating anti-access and area-denial technologies such as radar, surface-to-surface, and surface-to-air missiles among many others. Many defense experts agree the quantity and quality of anti-access and area denial technologies provide viable defense to large aircraft fleets.<sup>30</sup> If anti-access efforts aim to prevent US forces access into a theater of operations, then area-denial efforts aim to prevent freedom of action in the area under an adversary's direct control. Area denial operations include actions in the air, on land, and on and under the sea to challenge and prevent operations within their defended area.<sup>31</sup> Providing continuous defense against anti-access and area denial weapons poses challenges to both gaining and maintaining access.

Area denial efforts provide barriers to air, land, and maritime access. Aerial denial operations include coordinated efforts by an adversary's network of air forces and integrated air defense forces to maintain parity or superiority over territory and forces. Land denial operations include short- to medium-range artillery, rocket, or missiles strikes against forces at either littoral penetration points or air-landing points. These strikes occur before landing forces can disperse, when they are most vulnerable and include wide-area mine fields; contamination of large areas by chemical, biological, or radiological agents; and counter-special operations tactics. Long-range maritime denial threats include anti-ship cruise or ballistic missiles, and submarines. In the littorals, sophisticated mines, coastal submarines, and small attack craft represent barriers to

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<sup>30</sup> There is a wealth of information on why states use anti-access and area denial weapons as substitutes for other fielded forces or military. For more information on anti-access and area denial technologies, published studies, and analysis, see United States Department of Defense Joint Operational Access Concept. January 17, 2012; Andrew Krepinevich, et al. "Meeting the Anti-Access and Area-Denial Challenge"; and "Special Report: Anti-Access/Area-Denial."

<sup>31</sup> Andrew Krepinevich, et al., ii.

access.<sup>32</sup> Certainly, airlift aircraft are ill-suited to counter such technologies. Furthermore, expenditures to improve airlift's survivability in these environments currently represents fiscal and physical impossibilities. However, in the periphery, in states where such threats do not exist, airlift presents viable options but must overcome additional barriers to access.

International relations draw domestic influences into decision-making.<sup>33</sup> Domestic political influence can be divided into three subcategories according to its source.<sup>34</sup> First, *society-centered* theories explain the source of influence primarily from domestic social groups, interest groups, elections, and public opinion. Second, *state-centered* theories explain the source of influence primarily from the administration and decision-making structures of the executive branch. Third, *state-society relations* theories underscore institutions, education, and administration linking state and society. Democratic peace theory draws largely from *state-society relations* theories. Notwithstanding a discussion of each theory, if these theories are true and if any of the listed institutions or organizations influence domestic politics, then each can also be a barrier.

Domestic opinions influence the decision maker's perception of public support for an overseas military presence. The fear of retribution from voters in an upcoming election adversely influences decisions to send troops abroad.<sup>35</sup> While anecdotes may suggest a relationship between domestic political vulnerability and aggressive international behavior as a means to generate domestic popularity and support, according to research performed by Brett Leeds and David Davis, no connection between economic decline, electoral cycle, and the use of force exists.<sup>36</sup> Instead of using international violence to generate domestic support, domestic opinions have moderated decision-maker's use of force. Low domestic political support acts as a barrier for sending forces abroad because domestic support bolsters international action.<sup>37</sup>

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<sup>32</sup> Andrew Krepinevich, et al., ii.

<sup>33</sup> For more information on how domestic political structures affect international relations, see Kenneth N. Waltz, *Theory of International Politics*, 81-88, and Peter B. Evans, et al., *Studies in International Political Economy*. Vol. 25, *Double-Edged Diplomacy: International Bargaining and Domestic Politics*. (Berkeley: University of California Press, 1993), 10.

<sup>34</sup> For more information regarding these three subcategories of domestic political theory, see Peter B. Evans, et al., 6.

<sup>35</sup> For more information on how decision makers are influenced, especially on the subject of committing forces overseas, see Matthew A. Baum, 603-631.

<sup>36</sup> Brett Ashley Leeds and David R. Davis, 814-834.

<sup>37</sup> For more information regarding domestic political support of US allies according to terms of alliances and agreements and the corresponding lack of support for states not directly allied with the US but also not

In addition to barriers an administration faces, governance systems, and allies also present barriers to a US presence abroad. *Democratic cultural* and *democratic constraint* models point to a myriad of cases studies demonstrating the restraining power of public opinion in democracies.<sup>38</sup> Democracies are slower to react than authoritarian regimes. Their bureaucracies not only add barriers to unilateral action but also take more time to debate and contemplate sending forces to other states. Additionally, research shows the influence of foreign decision-makers (presidents, prime ministers, and other democratically elected officials) also has an effect on domestic political attitudes regarding a US military presence abroad.<sup>39</sup> Many of the foreign decision-makers constitute the heads of state within coalition states. Therefore, domestic political opinion influenced by the administration, political parties, its citizenry, or perspective coalition members can act as a barrier to US presence abroad.

The aspect of intimidation associated with the US also acts as a barrier to US forces abroad. States granting access to US forces risk domestic political backlash as well. Protests and domestic admonishment from their own citizenry forces access restrictions to the US military.<sup>40</sup> As a result, local governments are wary of granting access to US forces. If satisfactorily adjustments to the policies and actions of a government cannot create relationships, then discord between the states exists and short of using force for access despite policy differences, barriers to access will prevent or hinder relationships.<sup>41</sup>

Cultural differences between Western and other states also act as barriers. Cultural differences are often at the heart of many international relations challenges and, in particular, Western culture often conflicts with other cultures. Whether these differences exist within religious or ideological constructs, these differences between Asian and Middle Eastern states

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seen as adversaries, see Peter J. Katzenstein, *A World of Regions: Asia and Europe in the American Imperium*.

<sup>38</sup> For more information on the research that examines the link between domestic politics and decisions to use force, see Joe D. Hagan "Domestic Political Systems and War Proneness" 183-207.

<sup>39</sup> Danny Hayes and Matt Guardino, "The Influence of Foreign Voices on U.S. Public Opinion" *American Journal of Political Science*, Vol. 55, No. 4 (October 2011), 831-833.

<sup>40</sup> Examples of political turmoil and domestic disturbances associated with a US military presence were seen in the attacks made at US Embassies or Consulates General in Cairo, Egypt (September 11, 2012), Benghazi, Libya (September 11, 2012), Sanaa, Yemen (September 13, 2012), Herat, Afghanistan (September 13, 2013), Tunis, Tunisia (September 14, 2012), Karachi, Pakistan (September 17, 2012), Jakarta, Indonesia (September 18, 2012), and Ankara, Turkey (February 1, 2013). These attacks followed domestic political unrest in states granting access to US military forces.

<sup>41</sup> Robert O. Keohane, 53.

may prevent US access from fears of unwanted cultural mixing or cultural incompatibility.<sup>42</sup> US military presence abroad carries the perception of forcibly placing Western mindsets and vices into states with strong traditional histories or opposing governance systems.<sup>43</sup> A comprehensive study of cultural differences and the barriers they represent to the use of force, incentives, and cooperation is outside the scope of this work. Nonetheless, they do have a dramatic impact on access and must be reconciled in some manner.

Reacting to an environment shaped by an adversary presents complex challenges and limitations. Proactively shaping an environment can employ diplomatic, economic, and international institutions in addition to military force – all the instruments of power at the state’s disposal. Access gained through compellence in response to a conflict or the need to apply force is a form of reactive access. Reacting to environments already shaped to an adversary’s advantage requires a state to respond to, not establish, the initial conditions. These conditions may render diplomatic or other instruments of power insufficient leaving force as the only alternative.

Proactive access methods also have a temporal aspect reactive methods do not. First, the temporal aspect of establishing a relationship without the stress of an impending crises necessitating access requires fewer compromises and has the luxury of time. When states face deliberations that must successfully achieve objectives in a short time, the resultant effect is larger compromises on concessions and a greater risk the objective will fail.<sup>44</sup> With greater time, more points of disagreement meet with solutions. The adage that ‘relationships cannot be surged’ provides substance for the second advantage of proactive access. Proactive access establishes relationships and *empathetic interdependence* – gains by one state also seen as gains for another state.<sup>45</sup> Proactive access allows the host state to bargain and compromise for access instead of having the terms of access dictated to them.

## Summary

All access methods contain varying levels of commitment and cost. In terms of the Indo-Pacific, access operations should not elicit a forceful response from China but still achieve the

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<sup>42</sup> Kuan Yew Lee, et al., 28-31.

<sup>43</sup> Kuan Yew Lee, et al., 28-31,

<sup>44</sup> For more on “unbalanced exchanges” see Robert O. Keohane, 122-132.

<sup>45</sup> Robert O. Keohane, 123.

regional influence goals called for by US foreign policy directives. Access alternatives in the Indo-Pacific should reflect cost considerations but in doing so, not compromise on the commitment needed to provide appropriate influence. Airlift can help bridge this gap and allow the US to exercise power in two distinct ways. First, airlift gives compellence access methods credibility. Second, airlift turns incentivizing and cooperating access methods into viable alternatives.

Under the current conditions in the Indo-Pacific, if the US needs access, it must seek a soft power approach. Such an approach can eclipse conflict but it also puts the US in the best possible position should hard power be required. A study of international relations theories reveals the importance of the influence methods associated with hard and soft power. Influence changes behaviors because it creates relationships. Influence requires access but the methods of gaining access also display a state's intent. Therefore, access deserves mention as a function of methods for exerting influence. This chapter establishes a framework to view the larger international political movements in the Indo-Pacific.

By looking at the unique geopolitical environments of the strong states and noting how their actions shape and influence this region, it becomes reasonably clear why the US should use its influence and what power projection options it should consider for access. China, India, and Japan are ultimately as responsible for their own security as the US is responsible for its own security. China sees itself restricted in an international system it did not construct and does not benefit from in degree and quality. India sees a rising China as a threat and representative of an uncertain international system. India must shape the current international system to create a future system more commensurate with its goals. The fault lines between China and Japan hold potential for conflict and without a strong US military presence in the region, Japan would need to find other ways to balance against China.

Confronting and successfully navigating barriers precedes access. These barriers take the form of domestic politics and public opinion, the intimidation factor of a US presence, Western cultural differences, and anti-access and area denial efforts. Each barrier to access affects both the cost of gaining and maintaining access. The costs of maintaining access relate to the barriers encountered in each method. Where barriers to compellence access and maintenance may overshadow influence efforts, the same barriers do not exist for incentive or cooperative access. Maintenance costs are therefore a reflection of the costs associated with overcoming barriers –

domestic, diplomatic, and cultural alike. While access methods relying on force as the *only* resort present fewer options to decision-makers, access methods relying on force as a *last* resort present a greater array of options. This chapter and its consequent proposals provide the backdrop to test different access methods.





## CHAPTER 2

### Case Studies of Access

This section provides historical accounts of compellence, incentive, and cooperation access methods. The cases demonstrate criteria clearly delineating a dominant access method. Furthermore, they reflect the salient points from the theoretical analysis of the previous chapter as regards maintenance costs for sustaining access. The case studies broadly show examples of various access methods and their corresponding concepts at work. The case studies also reveal several conceptual components of each access method that bear noting for future airpower applications in the Indo-Pacific.

Historical evidence supports the three propositions argued for in this work. The compellence case demonstrates Britain's reliance on force and the consequent requirements for additional investments to support this chosen instrument of power. The incentive case demonstrates that China secured access to Gwadar in exchange for financial payments but then encountered barriers requiring additional commitments and resources to maintain access. The cooperation case reveals some of the upfront costs incurred by European and New England to access cotton but then demonstrates how cooperative behaviors created additional, less costly access points by the end of the US Civil War. The end result for Southern cotton was access at a reduced cost.

#### Compellence Case Study

The British, as an island apart from the European continent, relied on a sea-faring culture to conduct trade. Prior to the industrial revolution, roadways and over-land routes prevented easy transit for large quantities of materials. Sea lines of communication offered transit routes to new markets requiring less time than overland routes. As the British economy grew so too did demand for shipbuilding supplies and new markets for their products.<sup>1</sup> Raw materials imported to Britain led to textile mills and industrial growth while supplying British citizens with jobs and improved standards of living. The two causes for British entry into foreign markets were their

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<sup>1</sup> For more information on the British economy and its navy from pre-colonial times, see Paul M. Kennedy, *The Rise and Fall of British Naval Mastery*, and Robert G. Albion, *Forests and Sea Power: The Timber Problem of the Royal Navy, 1652-1862*.



economic needs to support increasing domestic standards of living and their navy's large consumption of capital and resource. To get supplies for its domestic economy, Britain needed a navy and in turn, Britain needed a strong economy to support its navy. This two-fold expression of the British condition led it, among other European powers, to seek access to foreign markets.

British entry into many of these markets came through their merchant maritime fleet. Merchants commissioned the building of vessels according to relatively few design variations, and consequently, needed little specialized support for specific ship designs.<sup>2</sup> Domestic economic growth linked British merchant access to markets with safe transit on the sea. The task of maintaining security on the high seas and in foreign ports required specialized ships. Differently than those designed to carry cargo and raw materials, naval vessels, outfitted with guns and cannons, large sails, multiple masts, and new hull designs, undertook security functions.<sup>3</sup> Although the British merchant fleet led forays into foreign markets to establish trade and procure raw materials, its naval fleet provided security in transit and kept sea lines of communication open.

Access to foreign markets, namely seaports for trading and commerce, expanded British influence and grew the British economy. Like many other European states, the size of trade enterprises linked domestic economic strength. Financial strength at home required financial strength abroad. A large and capable merchant fleet backed by a strong naval fleet successfully dictated the terms of British trade within foreign markets.<sup>4</sup> Navigation routes gained legal protection within England and justified her use of force to protect shipping and commerce.<sup>5</sup> Economic desires provided the impetus behind British overseas expansion. In turn, the expression of overseas expansion had a merchant and naval form, each with their own requirements.

The crew complements, design, and cost of merchant vessels differed greatly from naval vessels. The crew complement of most merchant vessels was small compared to the crew required to sail a naval vessel. Naval vessels, in addition to sailing and navigation duties, also required personnel to operate cannons and a Marine contingent to keep order while underway,

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<sup>2</sup> Robert G. Albion, 286-288.

<sup>3</sup> For more information on the relationship between Britain's merchant maritime fleet and its naval fleet, see Niall Ferguson. *Empire: The Rise and Demise of the British World Order and the Lessons for Global Power*.

<sup>4</sup> Paul M. Kennedy, 21.

<sup>5</sup> Paul M. Kennedy, 21.

board other vessels, and serve limited land duties.<sup>6</sup> The additional crewmembers required larger crew births on naval ships than on cargo or merchant vessels. The construction of naval vessels required more wood and reinforcement than merchant vessels to repel cannon fire. Because of crew complement and design, naval vessels cost more than merchant vessels. Their additional cost meant smaller overall numbers but their ability to protect shipping meant increased demand. Additionally, a naval ship's requirements while underway were different from merchant vessels. Merchant vessels did not require replenishments of ammunition and gunpowder. As a result, the appearance of naval vessels expressed a need for different support structures from merchant vessels. These support structures came by way of specialized seaports.

Employing sea power and linking their domestic economy to power projection, aided with specialized ports, the British were able to influence unprecedented amounts of territory. At its height, the British Empire affected people on every continent (see Figure 1). Since the British economy and its naval mastery depended on access to both markets and raw materials, long-term commitments to areas of access changed relationships. Over time, these relationships became less adversarial and as populations became more compliant, the requirements for continuous force to maintain access eroded over time. British compellence efforts reveals evidence of rising maintenance costs, peripheral actors, and the consequences of relying on force to underwrite domestic economic growth.

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<sup>6</sup> For more information on the history of the Royal Marines, their initial responsibilities, and their duties aboard British ships, see Lizbeth Stevenson, *1664 Establishments: Royal Marines* (London, England: Thomas and William Boone, 2012), and Paul Harris Nicholas, Lieutenant, Royal Marines. *Historical Record of the Royal Marine Forces*. Vol 1. London: Thomas and William Boone, 1845.

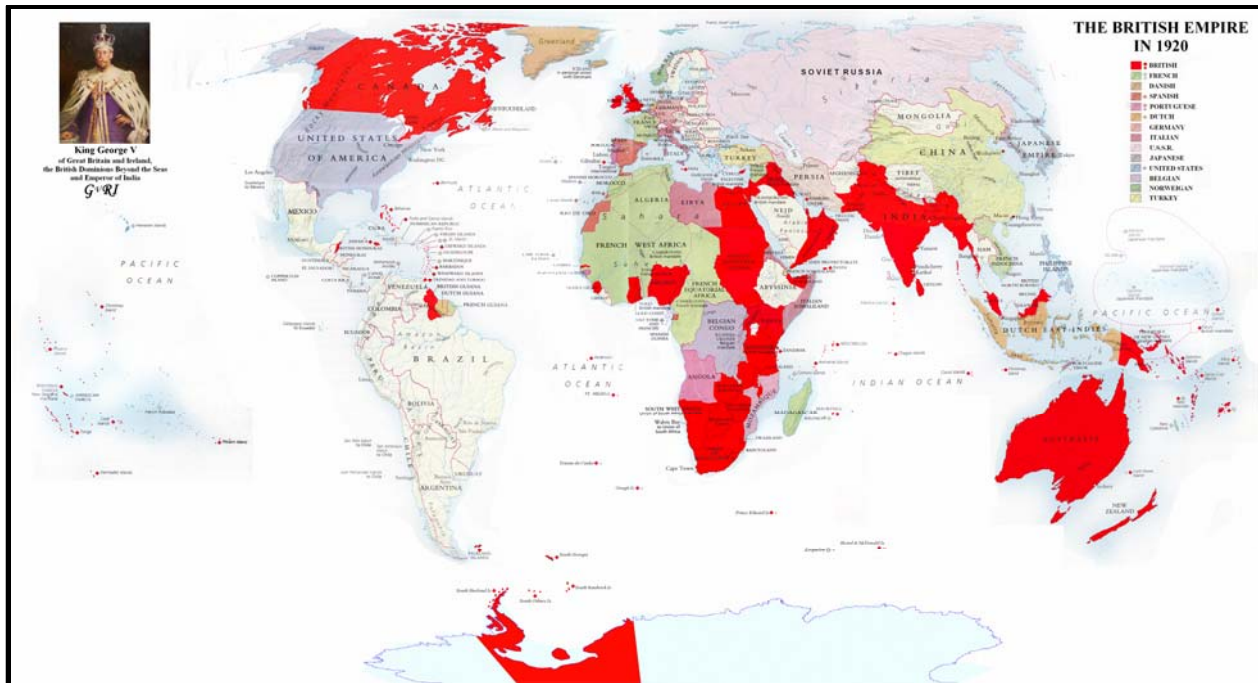


Figure 1: The British Empire in 1920.

Source: The Atlas of the British Empire. <http://www.atlasofbritempire.com/uploads/1920.GIF>

## Britain and Seaports

Naval superiority's reliance on seaports and their ability to increase the expanse of sea power make seaports vital. Although Britain's compellence efforts have deeply influenced the many states and people with which it has interacted, the focus of compellence aimed equally at local inhabitants and competing European rivals. Compellence methods used by the British to establish seaports are examined by focusing on Burma, Singapore, and Hong Kong. Creating a vast structure of seaports, the British were able to exert influence on a global scale. They used compellence access strategies against weaker states to secure access to seaports, thereby establishing favorable conditions for themselves. Through treaties backed with gunboat diplomacy, the British fleet laid claim to existing ports, or subordinated new ones to their control. Once the fleet achieved access and cultivated support facilities, naval operations extended influence to farthest reaches of the globe.

The British effectively used compellence access methods in many parts of the world to secure access to seaports. After a series of conflicts with France during the Napoleonic Wars, Britain looked for recovery in its colonies. The British required new markets for shipbuilding

and raw materials facing depletion of their domestic supplies.<sup>7</sup> Teak from Burma was highly prized for decking and hulls and demand drove further economic interests leading Britain to control the harvest and export from its Singapore source.<sup>8</sup> The Dutch were neither able to fully overtake the British nor able to expend sufficient capital to defend Singapore from British rivals. Eventually succumbing to British naval escorts of merchant shipping vessels into the contested trade routes surrounding Singapore, the Anglo-Dutch Treaty of 1814 officially placed this seaport under British control.<sup>9</sup> If the Dutch were no longer capable of asserting themselves in Singapore and defending their economic interest, then the indigenous inhabitants of Singapore, without modern weapons or means to resist, would fare no better. By 1824, Singapore was officially recognized as a possession of Britain and fortifications resembling those of Hong Kong, though on a smaller scale, were soon erected.

Naval historian Paul Kennedy asserted, “sea power exerted its greatest influence upon world affairs between the early sixteenth and the later nineteenth centuries.”<sup>10</sup> Throughout this time, Britain’s chosen instrument of foreign policy was the Royal Navy. The three major components underwriting sea power took root in access: production, shipping, and colonies and markets.<sup>11</sup> Trade for raw materials, dominance in shipping and sea transit, and the power of the British Navy all relied on access. For centuries, a powerful navy supported the British, aided by a smaller, long-service army and merchant marine.<sup>12</sup> Britain’s naval power was inseparable from its economic power.<sup>13</sup> As an island, Britain’s geographic isolation from the European continent required a strong navy to support its economy.<sup>14</sup> Additionally, the lack of developed methods of land travel and transportation reinforced the supremacy of sea power.<sup>15</sup>

The foundation of this supremacy was the ability to project power, aided in great part by British access to seaports. With territories scattered across every continent and ocean and in every time zone, Britain was "the empire on which the sun never sets." The Empire facilitated

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<sup>7</sup> The Maritime Heritage Project, "Seaports of the World: Burma."

<sup>8</sup> Robert G. Albion, 286-288.

<sup>9</sup> H. R. C. Wright. "The Anglo-Dutch Dispute in the East, 1814–1824" (*The Economic History Review*, 1950) 229–239.

<sup>10</sup> Paul M. Kennedy, XLII.

<sup>11</sup> Paul M. Kennedy, 71.

<sup>12</sup> Paul M. Kennedy, XXIX.

<sup>13</sup> Paul M. Kennedy, XLI.

<sup>14</sup> Paul M. Kennedy, 29-35.

<sup>15</sup> Paul M. Kennedy, 44-45.

the spread of British technology, commerce, language, and government around much of the globe during the Pax Britannica (1815 – 1859) of British Imperial hegemony.<sup>16</sup> Their primary means of spreading these contributions came from their ability to quickly resupply ships, trans-load cargo from distant ports to larger ones, and maintain important sea lines of communication.<sup>17</sup> The expansion in Asia, notably in Burma (1823), Singapore (1824), and Hong Kong (1841), relied on British naval vessels carrying Royal Marines to claim territory for the expansion of the East India Company.<sup>18</sup> Employing this model, the British accumulated large amounts of territory, anchored by seaports. Naval supremacy can be measured in the very activities seaports permit – production, shipping, and access to colonial markets.

Throughout the rise and dominance of the British Empire, a pattern of compellence emerges through the interplay of the Britain's East India Company and the Dutch East Indies Company. The Dutch East Indies Company originally controlled the seaport in Singapore. However, following Napoleon's annexation of the Netherlands in 1810, the British moved quickly to take over Dutch seaports in Singapore and prevent them from falling under French control.<sup>19</sup> Choosing to consolidate his power within Europe and not risk defeat by overextending his forces, Napoleon offered no resistance to Britain's move in Burma. The British erected a fortress in Singapore to hold it. By 1819, the British were firmly in control of Singapore. Soon thereafter, commercial enterprises began and the shipment of raw materials commenced.<sup>20</sup>

Britain exploited internal political struggles and civil uprisings in Hong Kong to secure interests in China. Within this example, there is an element of negotiation. British trade with China began decades prior to the First Opium War (1839 – 1842).<sup>21</sup> Political instability and civil unrest created discord and Britain moved quickly to protect its economic interests.<sup>22</sup> Armed ships with contingents of soldiers escorting merchant vessels as they transited Hong Kong seaports

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<sup>16</sup> Paul M. Kennedy, 149-175.

<sup>17</sup> Paul M. Kennedy, 168.

<sup>18</sup> For information on Burma, see Thant Myint-U, *The Making of Modern Burma*. For information on the acquisition of Singapore, see *The First Contest for Singapore 1819-1824*. by Harry J. Marks. Review by: Robert Van Niel. *The Journal of Asian Studies*, Vol. 19, No. 4 (Aug., 1960), 475-476. For information on the acquisition of Hong Kong, see Elijah Coleman Bridgman, *The Chinese Repository*, 63.

<sup>19</sup> The Maritime Heritage Project, "Seaports of the World: Singapore."

<sup>20</sup> The Maritime Heritage Project, "Seaports of the World: Singapore."

<sup>21</sup> For information regarding the First Opium War's generally agreed upon cause, see Foster Stockwell, 72-78. For information on the trade items and agreements between China and Britain, see Hunt Janin, *The India-China Opium Trade in the Nineteenth Century* (Jefferson, N.C.: McFarland, 1999), 207.

<sup>22</sup> Steve Yui-Sang Tsang, *A Modern History of Hong Kong* (London: I.B. Tauris, 2004), 3-13, 29.

displayed British resolve.<sup>23</sup> Powerless against such a force, China accepted the unequal terms of the Treaty of Nanjing (Nanking), ceding control of Hong Kong to Britain.<sup>24</sup> The seaport in Hong Kong held, among other things, garrisons of British troops, private shipyards for construction, numerous entrepreneurial endeavors, court systems and, of course, supplies and equipment dedicated to ships.<sup>25</sup>

Like British seaports elsewhere, technological advances and a means to exploit them dramatically strengthened sea power. British sea power supported compellence access methods of seaports and, in turn, these seaports helped spread sea power over the globe. The differences in hull design, purpose, and accoutrements between merchant and naval vessels required specialized equipment. Where naval ports resembled military bases, merchant ports resembled market places. Sections of ports differentiated between naval and merchant vessels. Where merchant ports specialized in trade activities, naval ports dedicated efforts to specialized naval vessels and their specific requirements.

The rise of naval bases had additive benefits for sea power. Sea power and seaports intertwined as stores of supplies and ammunition, high-grade coal, and complex machinery in naval ports enhanced sea power.<sup>26</sup> Larger ships brought more firepower to the British Navy but required expansion of existing naval ports. Expansion at existing ports required either additional territory or new infrastructure. In ports where expansion was impossible, nearby ports constructed to augment existing ports created a larger web of naval bases. Dedicated trade smiths repaired and upgraded vessels transforming them into modern, faster ships with more sails that were efficient, streamlined hulls, and better ballast among other improvements.<sup>27</sup> This advantage manifest itself most widely in naval vessels as the proliferation of technological advances in weaponry, sail, support, and even tactics had collection points in naval ports throughout the Empire.

The combination of seaports and technology meant British ships did not need to return to British ports and dry docks for modifications or repairs. Where other states lacked seaport access affording them such opportunities, the British exploited them and gained a favorable position

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<sup>23</sup> Steve Yui-Sang Tsang, 4-10.

<sup>24</sup> *Treaty of Nanjing*.

<sup>25</sup> Peter Melson, *White Ensign - Red Dragon: The History of the Royal Navy in Hong Kong, 1841-1997*. Hong Kong: Edinburgh Financial, 1997.

<sup>26</sup> Paul M. Kennedy, 62-84

<sup>27</sup> Niall Ferguson, 172-184.



over competitors. The British kept their fleets at sea longer than European competitors, pressed offensives for longer periods, and magnified the presence of naval fleets far above what her competitors mustered. Control of the *great commons* and highways of commerce, specialized seaports, and a strong economy gave Britain overbearing power on the sea and kept competitors from attempting the same.<sup>28</sup> Docked at regular intervals in these specialized ports, British naval vessels did not suffer reductions in speed realized like navies with fewer, dispersed ports. Injured crewmembers received medical care and returned to service more quickly than crewmembers from other navies who often met a far more dismal fate.

### **The Unpredictable and Rising Costs of Maintaining Compellence Access**

Seaports magnified sea power but this expression of power carried magnified costs. As the number of naval vessels increased, the costs of keeping them at sea increased. Seaports required expensive infrastructure, constant security, and necessary updates to remain relevant. A constant supply of high-grade coal, ammunition, and manufactured parts for repairs and upgrades required either constant resupply from British manufacturing plants or large stockpiles housed inside seaport facilities.

The logistic demands seaports put on the British economy were also twofold. First, while the logistics transports required protection, a necessary but costly activity for a naval vessel, their seaports bore this activity with added costs. Escorting resupply ships and ensuring open navigation routes from British ports added increased responsibilities on naval vessels. The result was increased need for larger number of naval vessels, and, in turn, higher coal usage rates, increased repair rates, and the need for larger stockpiles of supplies and equipment.

Secondly, the domestic industrial base of Britain had to keep pace with demands from the Royal Navy and merchant shipping. Building and maintaining a fleet larger than all of those on the European continent combined required unprecedented resources and production. The resultant specialization of labor and industry dedicated to its maritime and naval fleets restricted diversification in a broad industrial base for manufacturing. Financial institutions were also

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<sup>28</sup> AT Mahan, *The Influence of Sea Power Upon History, 1660-1783* (New York: Dover Publications, 1987), 138.

strongly connected to shipping. These specializations were both costly and prevented Britain from developing different sources of power.<sup>29</sup>

As masters of sea power, the British relied initially on sailing ships, then eventually engine-driven ships from mid-1860 to project power and influence.<sup>30</sup> Both types of ships required seaports for supplies, fresh water, and eventually coal that extended both the range and capability of British ships. Therefore, a study of Britain's naval supremacy is equally a study of its access and naval efforts supported by seaports. Without seaports, resupply and replenishment would not be possible. Britain's use of compellence methods affected geopolitical environments throughout the world, but did not, however, risk intensifying engagements it might lose with indigenous forces. Britain did not risk the armed reprisals from other states after gaining access to other weaker states. Outside of Europe, there was little concern about compellence access methods might destabilize other counties or intensify security concerns. Merchant shipping and naval battles were constant throughout the history of Britain's Empire but their fear lay in European continental powers, not with those whose lands they conquered and held as a result of taking control of seaports.

Influence precipitates from successful access methods. The study of British seaports reveals several important factors of compellence access methods. The British were able to use their strong economy to fund a large open water merchant fleet. As their economy grew, the British built specialized naval ships to protect their merchant fleet. Ports enhanced British power projection. Their naval superiority protected the very seaports on which British trade relied. In turn, the British enhanced their seaports with specialized labor and equipment allowing them to outcompete any European rivals.

The British were successful, in part, because they used seaports to create large asymmetries between their forces and others. As compellence methods stabilized local populations, the Britain could rely more on negotiation and cooperation strategies to maintain port access. British also showed remarkable commitment to their seaports. Infrastructure developments from specialized naval ports to schools and other civic improvements worked to appease and pacify local populations. Over many decades, local governments took root and cooperated with British forces for protection and security. The British maintained access through

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<sup>29</sup> Paul M. Kennedy, 184.

<sup>30</sup> Robert G. Albion, 286-288.



negotiation and compromise in addition to other developmental projects that improved the host state's prosperity.

Compellence access to seaports demonstrated success but incentive and cooperation methods were also present. As regards national British actions in occupied territories, over centuries of presence, they constructed schools, hospitals, markets, and entire systems of governance.<sup>31</sup> Although there are also examples of brutal conquests and systematic exploitation by European colonial powers, the British Empire's commitment to specific institutions and principles demonstrated a distinct character remarkably different from other European states.

The British were willing to make religious accommodations and cede stewardship of institutions and civic programs. Compromise gave institutions legitimacy and resiliency to their efforts. Cooperation also took place as the mutual interests of economic growth and national security often led native populations to participate commercial activity and in the British armed forces. These examples of compromise and cooperation were by-products of initial compellence actions supported by long-term commitments to prosperity and stable governance. Nonetheless, they demonstrate that maintaining access from compellence costs far more than the initial cost of gaining access.

### **Incentive Case Study**

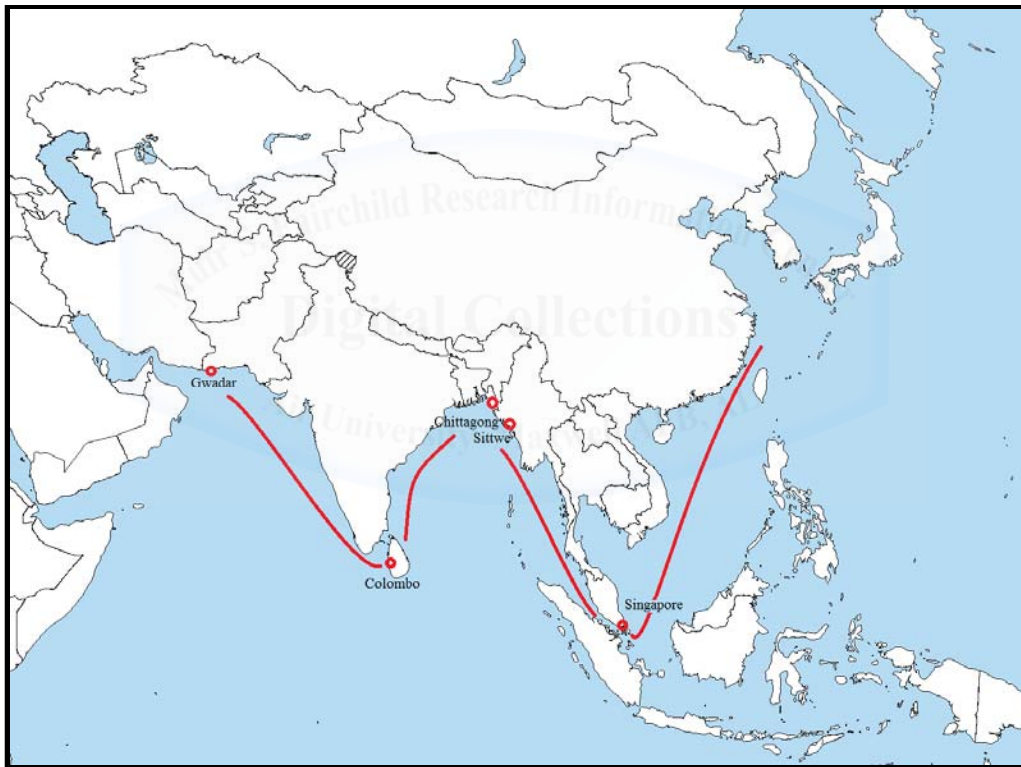
While the British effectively used compellence to gain access, the use or threat of force would have undermined Chinese efforts to gain access to the Pakistani seaport of Gwadar. With a large US military presence in the region, the Chinese could not risk the use of force against a US ally. Consequently, the Chinese used an incentive access method, negotiating access in exchange for financial support to Pakistan. China has stated its access to Gwadar helps secure transportation of valuable hydrocarbon resources from Middle East origins to Chinese destinations. Although there are many other ports connecting China to the origins of these

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<sup>31</sup> For more information on the British Empire, and the shortcomings and success of British Colonial rule, see: David Armitage. *The Ideological Origins of the British Empire*. Cambridge: Cambridge University, 2006; George Bearce. D. *British Attitudes Towards India 1784-1858*. London: Oxford University Press, 1961; and Niall Ferguson. *Empire: The Rise and Demise of the British World Order and the Lessons for Global Power*.

resources, Gwadar serves as an example of a repeating pattern of Chinese access throughout the Indo-Pacific as part of its “String of Pearls” strategy.<sup>32</sup>

China’s “String of Pearls” expresses a rising geopolitical influence in the Indo-Pacific through efforts to increase access to ports and airfields (see Figure 2).<sup>33</sup> The “String of Pearls” strategy has two parts. First, China extends access by developing special relationships from the South China Sea through the Strait of Malacca, across the Indian Ocean to the Arabian Gulf. Second, China is modernizing military forces to execute this strategy. While the first objective may secure hydrocarbon sources, the second brings China’s maritime power in contact with states fearful of Chinese intentions.<sup>34</sup>



**Figure 2: China's "String of Pearls."**

**Source: Author's Original Work**

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<sup>32</sup> The phrase “String of Pearls” was first used by Booz-Allen-Hamilton in “Energy Futures in Asia” to describe China’s emerging maritime strategy by. The US Department of Defense’s Office of Net Assessment commissioned this report in 2005.

<sup>33</sup> Juli A. MacDonald, et al. “Energy Futures in Asia” (Washington, DC: Booz Allen Hamilton, November 2004), iii.

<sup>34</sup> Juli A. MacDonald, 1.

According to the theory, each “pearl” demonstrates successful access and acts as a nexus of geopolitical influence and potential military presence.<sup>35</sup> Seaports, airfields, diplomatic ties, and force modernization form the foundation of the “String of Pearls.” Hainan Island, Woody Island, a container shipping facility in Chittagong, Bangladesh, and deep water ports in Sittwe, Myanmar, and Colombo, Sri Lanka are all “pearls,” in addition to the navy base in Gwadar, Pakistan.<sup>36</sup>

Establishing a forward presence along the sea lines of communication from China to the Middle East secures resources but also represents actions placing place regional stability in a precarious position. As part of an annual report to Congress, the Department of Defense identified a growing trend of arms sales in conjunction with economic aid to many of these states as well.<sup>37</sup> The report also notes increased capacity for short-duration, high intensity regional conflicts to protect strategic access points.<sup>38</sup> In 2012, Chinese officials began referring to their territorial waters encompassed by a “Nine-Dash Line” (see Figure 3).<sup>39</sup> Following robust financial and other aid associated with incentive access gained in previous years, the recent “Nine-Dash Line” position supplants existing territorial claims and finds roots in the vague boundary first promulgated by the Chinese Nationalist government in 1947.<sup>40</sup>

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<sup>35</sup> *Military and Security Developments Involving the People's Republic of China* 2013, 2.

<sup>36</sup> Sudha Ramachandran, “China’s Pearl in Pakistan’s Water,” *Asia Times Online*, March 17, 2005.

<sup>37</sup> *Military and Security Developments Involving the People's Republic of China* 2013, 2-3.

<sup>38</sup> *Military and Security Developments Involving the People's Republic of China* 2013, i.

<sup>39</sup> *Military and Security Developments Involving the People's Republic of China* 2013, 3.

<sup>40</sup> Zhiguo Gao, and Bing Bing Jia, “The Nine-Dash Line in the South China Sea: History, Status, and Implications.” *The American Journal of International Law*, Vol. 107, No. 1 (American Society of International Law: January 2013), 122.

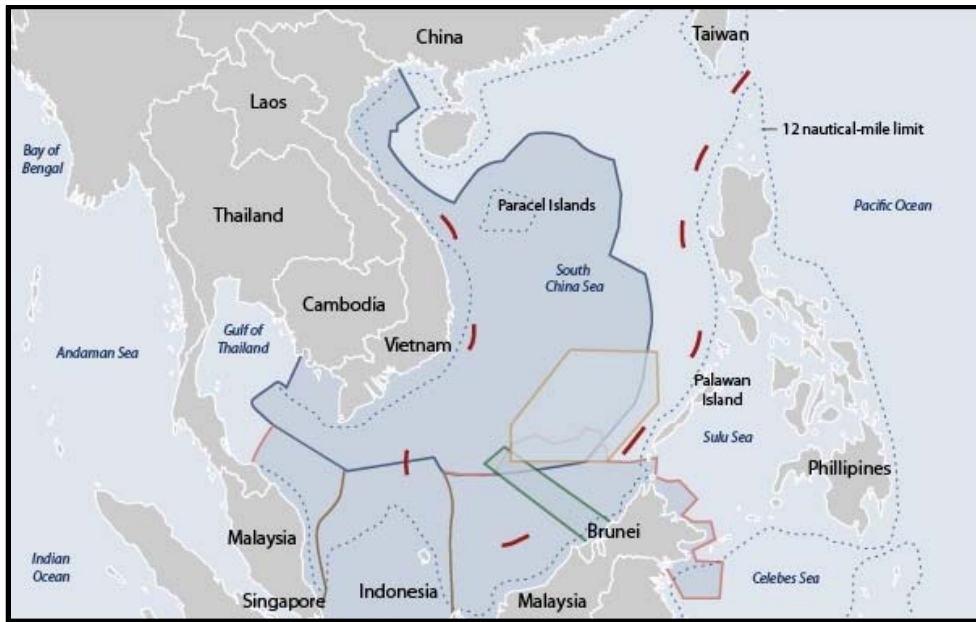


Figure 3: China's "Nine-Dash Line."

Source: U.S. Department of State, Office of the Geographer; GEBCO

The “Nine-Dash Line” serves three purposes in conjunction with the “String of Pearls” theory and may indicate a larger Chinese intent.<sup>41</sup> First, it represents Chinese sovereignty over the enclosed island groups. These claims are in direct opposition to claims made by Taiwan, Malaysia, Philippines, and Vietnam. Second, it establishes rights to fishing, navigation, and oil and gas exploration and drilling activities. Third, it serves as a potential delimitation line of maritime activity for other states. If the “String of Pearls” establishes land access as a means to protect the transit of resources to China, then the “Nine-Dash Line” establishes sovereignty over sea access. Chinese naval activity in the South China Sea including standoffs with the Philippines and Vietnam provide an example of incentive access leading to compellence. If successful, these territorial claims may provide precedent for similar activities along other portions of the “String of Pearls.”

### The Sustainment of Costs to Maintain Incentive Access

It is important to assess China’s access methods in order to understand both the concepts of incentive access and its broader implications. China’s incentive access will be measured against the second proposition’s claim that maintaining incentive access has steady costs. To

<sup>41</sup> Zhiguo Gao and Bing Bing Jia, 123.

secure access to Gwadar, negotiation over the payment made to the Pakistani government took place in exchange for access to the seaport. While cooperation played a lesser role as Chinese and Pakistani officials partnered over trade agreements and additional access to land for expansion, the Chinese successfully negotiated access to the Indian Ocean, the nearby Strait of Hormuz, and Arabian Gulf. The Pakistani government received investments in the port and capital for other development as the Chinese negotiated for access. Both cooperated against India.

The Pakistani offer also demonstrates two access methods: incentives and cooperation. The geography of Gwadar makes for an enticing foothold situated on the Indian Ocean's border with the Gulf of Oman, near the Strait of Hormuz. First, the Chinese used incentives to secure access to the Indian Ocean port for \$200 million.<sup>42</sup> Second, the Pakistanis cooperated with China to balance against India and prevent naval blockades like those in 1971 and 1999 that had serious impact on the Pakistani economy.<sup>43</sup> Chinese access to Gwadar provided another "pearl" for China. For Pakistan, the presence of a strong and adversarial navy port provided insurance against an Indian naval blockade

Although the ports China is currently developing for access to the Indian Ocean have historic pasts with others, their transition to viable seaports serving Chinese ambitions have cultural barriers to overcome. This incentive method created a tenuous, long-term relationship that hinged on successfully melding large-scale infrastructure with regional and international stability. While Gilpin, describing harmonization, offered that international negotiation approaches like this may seek eradication of national differences over time, it is clear that not all interested parties were involved in the negotiations.<sup>44</sup> For their part, the Chinese government negotiated further land holdings next to the port for added capacity. The land interests enflamed an existing ethnic tension causing armed retaliation within Baluchistan – the province of Pakistan where Gwadar is located – drawing concern from Chinese officials and slowing infrastructure development.<sup>45</sup> If China successfully negotiated expansion within Gwadar, then it was unsuccessful responding to the second-order effects of that expansion. These second-order

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<sup>42</sup> Sudha Ramachandran.

<sup>43</sup> Sudha Ramachandran.

<sup>44</sup> Robert Gilpin and Jean M. Gilpin, *Global Political Economy: Understanding the International Economic Order*. (Princeton, N.J.: Princeton University Press, 2001), 192.

<sup>45</sup> K. Alan Kronstadt, "Pakistan-US Relations." *Congressional Research Service* (February 6, 2009. Washington, DC: Government Printing Office, 2012), 69.

effects have made further development of Gwadar difficult. Notwithstanding the response generated within India and other groups to hamper or counter the Chinese efforts in Gwadar, negotiation access methods take considerable time and run the risk of unpredictable political responses.<sup>46</sup>

Although the Chinese successfully used incentives to gain access to Gwadar, instability in Pakistan may result in further economic loss in Gwadar. As of 2014, the port at Gwadar continues to struggle. It lacks the scale and technology suitable for the largest ships and the connectivity of other ports that can trans-load shipping containers on rail or truck. Despite its struggles, it still serves as a viable seaport where Chinese naval forces can find safe harbor. In the long-term, access to Gwadar, despite current economic challenges, provides China with significant offsetting benefits.

The Chinese preceded with caution in region marked by a strong US and coalition partner presence. They were largely restricted to compromise and cooperation to establish access since the use of force for access in Gwadar risked direct US involvement. This cautious approach displays China's restraint against weaker states and may suggest a broader understanding of the fragile geopolitical environment. In this example, legitimate access through incentives and compromise is far less likely to draw in other powers.

China negotiated a price for its access, offering Pakistan financial payment, supplies, materiel, and job opportunities for Pakistanis. In return, China gains a suitable seaport while Pakistan also hedges against the potential of another Indian blockade. The overall costs of maintaining incentive access are tied to sustaining the infrastructure and support to the host state. As long as China continues to support Pakistan, access will remain open. If negotiation is a way of discussing access before action, then realizing its full cost only occurs afterward.

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<sup>46</sup> In an announcement on February 28, 2014, the Indian Government has made agreements to move forward with a deep-water port in Chabahar, Iran in an effort to encircle Pakistan and prevent Chinese influence from dominating the Indian Ocean. For more information, see the article in the Indian news agency ZeeNews, "India, Iran to discuss Chabahar port issue during Nauroz." Accessed March 23, 2014. [http://zeenews.india.com/news/nation/india-iran-to-discuss-chabahar-port-issue-during-nauroz\\_914980.html](http://zeenews.india.com/news/nation/india-iran-to-discuss-chabahar-port-issue-during-nauroz_914980.html). The port in Gwadar is only one of many the Chinese have developed since 2000. Their port in Columbo, Sri Lanka and Myanmar indicate the theory of a Chinese "string of pearls" theory is correct. Nonetheless, Beijing argues the developments are to better manage its energy and commerce needs. For more information, see the article June 8, 2013 in The Economist, "China's Foreign Ports: The New Masters and Commanders." <http://www.economist.com/news/international/21579039-chinas-growing-empire-ports-abroad-mainly-about-trade-not-aggression-new-masters>.



Incentive methods occur with other instruments of power operating in the background. Incentive access methods are clear to discern from Chinese and Pakistani interactions over Gwadar but there is also an underlying tone of persuasion in the form of a strong and capable Chinese military and economy. Just as the US peacefully negotiates with other states, the Chinese negotiate from a position of formidable strength. Nuclear weapons, military power projection, and a strong economy – symbols of power and prestige – are constantly operating in the background of Chinese negotiations. While the “Nine-Dash Line” does not encompass any portion of the Indian Ocean, it does present an example where incentive access led to compellence methods for sustainment – the movement of that power and prestige to the forefront of Chinese foreign policy. Maintaining incentive access sustains consistent costs over time unless the relationship changes.

There is uncertainty whether China’s growing influence is in accordance with its stated policy of peaceful development, or whether these efforts are a bid for greater regional primacy. The intent behind the “String of Pearls” strategy remains unclear amidst an opaque political process and regional tensions from a war with India in 1962. This complex strategic situation could determine the future direction of China’s relationship with the United States, as well as China’s relationship with neighbors throughout the region. Where Waltzian logic suggests China seeks to create power within to become a great power, Gilpin’s hegemonic stability theory suggests China seeks to change the upset the international system for its benefit. Regardless of the motive, the concepts developed by Schelling offer explanations of how China using bargaining and negotiation to gain access in the Indo-Pacific.

### **Cooperation Case Study**

While previous cases explored access sought by states, access can also be granted for resources. Although aspects of a cooperative access methods were seen in the Gwadar case study, the US Civil War provides such an example of access for a resource. Despite blockades and other controls specifically designed to suppress the cotton industry, cooperative access methods assured its path to markets in England and Northern states.

The ultimate evaluation of blockading the Mississippi River and Southern ports draws much debate. While many historians cast doubt on the specific effects of the naval blockade, the record of cotton shipments received by textile mills reveals that while blockade running efforts

may been successful, specific mechanisms were put in place to handle shipments of cotton. The focus of this section is not a historic retelling of events but a study of access methods developed for a vital commodity that did not exist prior to the 1861.

Well before and long after the US Civil War, Southern cotton production and sales provided considerable economic wealth. From 1803 until 1937, the US was the world's largest exporter of cotton, including the period during the Civil War from 1861 to 1865.<sup>47</sup> Northern states and British industries relied heavily on raw cotton. Over seventy-five percent of Britain's cotton was imported from the US prior to the 1861.<sup>48</sup> The cotton textile plants in Lancashire, Alsace, and Massachusetts were the engine houses of the cotton empire Southern plantations were fueling.<sup>49</sup>

Prior to the US Civil War, cotton flowed from Southern plantations to Atlantic and Gulf Coast ports destined for textile mills in Britain, France, and Massachusetts.<sup>50</sup> Within several months after war broke out, President Lincoln implemented a naval blockade along the Mississippi River and southern seaports.<sup>51</sup> The blockade intended to restrict the flow of supplies and raw materials and attempted to starve the South's economy and bring its leaders to terms.<sup>52</sup> Initially unsuccessful and very porous, the blockade did affect cotton markets.

During 1860, Southern states were exporting more than 2.5 million bales of cotton to Europe.<sup>53</sup> After war broke out, Southern cotton growers set fire to more than 3 million bales of cotton to create a shortage and draw European powers into the war to secure their access to cotton. Additionally, cotton exports to Europe decreased and created a "cotton famine" in hopes of forcing Britain and France to recognize the Confederacy and draw them into the war.<sup>54</sup> While the destruction of cotton did create both a shortage and drastically increase the commodity's

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<sup>47</sup> The Cotton Exporter's Guide, The Cotton Exporter's Guide. "The Importance of Cotton in World Trade" (*International Trade Center*, 2014).

<sup>48</sup> Eugene R. Dattel, "Cotton and the Civil War." *Mississippi History Now*: An Online Publication of the Mississippi Historical Society.

<sup>49</sup> Sven Beckert, "Emancipation and Empire: Reconstructing the Worldwide Web of Cotton Production in the Age of the American Civil War." *The American Historical Review*, Vol. 109, No. 5 (December 2004).

<sup>50</sup> Sven Beckert.

<sup>51</sup> Winfield Scott. Letter to Major General George B. McClellan, May 3, 1861. "The Anaconda Plan" (Scott to McClellan). Union Correspondence, Orders, And Returns Relating To Operations In Maryland, Eastern North Carolina, Pennsylvania, Virginia, From January 1, 1861 to June 30, 1865..

<sup>52</sup> Will Davis, "War: The Coming of War." *The American Civil War Center at Historic Tredegar*. University of Virginia: Virginia Center for Digital History. 2014.

<sup>53</sup> Sven Beckert.

<sup>54</sup> David L. Cohn, *The Life and Times of King Cotton* (New York: Oxford University Press, 1956), 130.



price, previous stock piling efforts in Britain helped dampen the effects. Bumper crops from 1850 to 1860 created a surplus of cotton in Europe that gave valuable time for merchants and textile plants to find other sources.

As the war paralyzed the world's dominant cotton producer, prices skyrocketed. In 1860, cotton sold for 10¢ per pound. By 1862, after British surpluses were depleted, prices rose to \$1.89 per pound – a price increase of over 500%.<sup>55</sup> If 1862 represented a difficult year for the cotton industry as stockpiles were exhausted, then 1863 to 1865 reflected the market's value for access to cotton.<sup>56</sup> In Northern textile mills, demand for cotton soared with government contracts for uniforms and other goods for Union soldiers.<sup>57</sup>

Blockades of Southern ports and the Mississippi River in addition to the rise of other competitive markets formulate the focus of this cooperative access case study. Mutual interest and common benefits create access methods where none previously existed. Maintaining this type of access incurs reduced costs over time because avenues for access proliferate based on common interests and economic opportunity. Cotton cultivated in India, Egypt, and Brazil after 1863 created competition with Southern cotton and risked forcing Southern cotton growers out of existing markets. Southern cotton plantations looked for new methods to bypass Union blockades and access European markets and European powers found inventive ways to bring cotton to production centers. At the same time, textile plants in Massachusetts, forced to use only cotton grown in Free states, soon explored options to access Southern cotton, despite legal restrictions and Winfield Scott's blockade (see Figure 4).

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<sup>55</sup> David L. Cohn, 130.

<sup>56</sup> David L. Cohn, 130.

<sup>57</sup> Emerson David Fite, *Social and Industrial Conditions in the North During the Civil War* (New York: Macmillan, 1910), 151.



**Figure 4: Scott's Great Snake – the Anaconda Plan for the blockade of the Confederacy.**

**Source: Library of Congress, Geography and Map Division.**

The Union Navy had neither the men nor the equipment to manage the blockade at its inception.<sup>58</sup> Eventually, captured ports, newly built ships, and more soldiers strengthened the blockade. Unfortunately for the Union military, European and Northern cotton merchants looked for new methods to access cotton. Delicately sidestepping direct involvement, the British produced fast steam ships, smaller in dimension than their cargo-hauling predecessors and significantly more agile. Royal Navy officers, on leave from the British Navy, captained these steam ships as they ran the Union blockade and transported cotton to ports in Bermuda, Cuba, Mexico, and New England. The smaller cargo holds of blockade-runners meant even successful attempts delivered modest amounts of cargo. Nonetheless, the amount was sufficient to keep both prices and incentives high for blockade running.

The value of the commodity made affordable the additional measures taken. Commissions over 500% also meant far fewer attempts would have to be successful in order to match previous years' profits from the export of cotton. No record of blockade-runners in

<sup>58</sup> For more information about the dates, locations, troop levels and equipment allocated to the blockade and what later became known as the Anaconda Plan, see Allen C. Guelzo, *Abraham Lincoln: Redeemer President* (Grand Rapids, MI: Wm. B. Eerdmans Publishing, 1999).

Southern ports existed prior to 1861. Furthermore, transportation to ports in the Bahamas, Cuba, and Mexico prior to 1861 was a fraction of that during 1862 to 1865.

In addition to steam ships running blockades through Atlantic and Gulf Coast ports, Mississippi River and overland transportation methods were also used. From intense lobbying efforts from Massachusetts textile mills and growing unemployment, agreements were made to purchase cotton from Union states and plantations in areas under Union control.<sup>59</sup> The high prices were incentive for Southern growers to smuggle cotton northward to mix with legal cotton. As Union and merchant ships transported food down the Mississippi for sale, their return trips were laden with smuggled southern cotton destined for ports along the Ohio River Valley where legal and smuggled cotton mixed before delivery to Northern textile mills.

### **The Decreasing Costs of Maintaining Cooperative Access**

Compellence and bargaining methods from the Europeans were largely unnecessary to maintain access to cotton. Although the disruption of the global supply of cotton created other markets for its production, during the US Civil War, cooperation methods satiated demand. David Cohen, author of *The Life and Times of King Cotton*, wrote blockade running was very effective getting Southern cotton past Union ships to Caribbean ports.<sup>60</sup> He estimated the chances of capture were one in ten in 1861, one in eight in 1862, one in three by 1864, and by 1865, blockade running virtually stopped.<sup>61</sup> Cohen further estimates more than 600 ships ran blockades more than 8,000 times bringing in small arms, finished goods, and food among other items.<sup>62</sup> British merchant steam ships were approximately one quarter of this total and sometimes captained by British naval officers on leave.<sup>63</sup> However, most British ships transported cotton from Caribbean ports to Europe instead of directly running the blockade.<sup>64</sup>

The British government relied heavily on the cooperative efforts between British and Confederate merchants and the access structures they created during the US Civil War. A

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<sup>59</sup> David L. Cohn, 132-8, 195-9.

<sup>60</sup> David L. Cohn, 130.

<sup>61</sup> David L. Cohn, 130.

<sup>62</sup> David L. Cohn, 129-130.

<sup>63</sup> David L. Cohn, 130 and James Russell Soley, *The Navy in the Civil War*, Vol. 1, *The Blockade and the Cruisers*. (New York: Charles Scribner's Sons Pub., 1883). 173.

<sup>64</sup> For more information on the types of ships and their crews, see Chapter VI: The Blockade Runners and Chapter VII: The Commerce-Destroyers in James Russell Soley, *The Blockade and the Cruisers*.

cursory review of the literature did not produce any evidence that this type of access existed prior to 1861 nor after 1866. This strongly suggests cooperative access existed for the sole purpose of bypassing the Union blockade to access cotton. European and Union cotton mills and textile plants produced finished goods for sale in local markets and global export. Revenue from trade created still more opportunities for economic growth while tariffs created wealth for individual governments. In turn, wealth fueled the expansion efforts of both Europe and the US in the centuries to come. If commerce created wealth for states, then commerce also guided cooperative arrangements for mutual benefit from 1861 to 1865.

As long as the cooperative efforts secured access to cotton, there was little reason to pursue other access methods. Caribbean ports maintained access to cotton and the British and French remained largely indifferent to entering the war, despite the cotton famine from 1861 to 1863.<sup>65</sup> The British were reticent to admonish the Union blockade, themselves having relied on the legitimacy and legality of naval blockades.<sup>66</sup> The French were economically and militarily incapable of sending significant forces to aid Confederate efforts.<sup>67</sup> The Union position that any recognition of the Confederate States constituted an act of war placed significant barriers on negotiated access or even overt and expansive cooperation. The limited cooperative efforts succeeded and by 1865, King Cotton diplomacy – the tactic of drawing European powers into the Civil War to protect their access to Southern cotton – clearly failed.<sup>68</sup>

The cost of maintaining cooperative access to Southern cotton was offset in a number of ways. The result was that the actors seeking to maintain access paid lower costs over time. First, the cost of getting Southern cotton to market deferred the cost of building fast steamships to the merchants in New England and Europe – Southern cotton producers incurred little additional costs getting their product to market. Second, strong ties created numerous pathways for Southern cotton to travel and mix with other, legal sources of cotton. The increased trade in smuggled cotton along the Mississippi River occurred because of the relationships created

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<sup>65</sup> For more information on British sources of cotton, see Frenise A. Logan *India--Britain's Substitute for American Cotton, 1861-1865*. The Journal of Southern History, Vol. 24, No. 4, pp. 472-480.

<sup>66</sup> For numerous examples of British blockades, see Paul M. Kennedy, *The Rise and Fall of British Naval Mastery*.

<sup>67</sup> For more information on Napoleon III's decision to remain neutral in the US Civil War and not recognize the Confederate States along with France's concerns within continental Europe during the Second French Empire, see Alain Plessis, *The Rise and Fall of the Second Empire, 1852-1871*.

<sup>68</sup> David L. Cohn, 121-3, 139-140.

between growers, transporters, and merchants. Where the initial costs of chartering merchant ships traveling to Southern ports was high, eventually, legislative action in the North led to the creation of Union-controlled cotton plantation in the South. Most importantly, the common interests of economic profit changed the attitudes of some Southern plantation owners as they disavowed allegiance to the Confederacy and supported Union efforts.<sup>69</sup>

### Case Study Summary

Different access methods, their inherent requirements, and resultant costs of maintaining access provide useful concepts for considering future access efforts. First, physical access was vital to national interests. Those interests ranged from securing economic trade and building national wealth in the case of the British, securing transit routes for hydrocarbon resources for national development in the case of the Chinese, or securing the raw materials vital to local economies and global trade in the case of access to Southern cotton. Secondly, the access methods used did not undermine the objectives sought – instead access enhanced influence. The methods of access uncover aspects of their respective theory for potential application to the Indo-Pacific.

The case studies also show each of the theories at work. Schelling's compellence theory rests on the ability to use or threaten force and the British possessed both the means and will to employ overwhelming force throughout the globe. Compromise and bargaining theory, also offered by Schelling, showed that strategic access could be levered for economic benefit and development. Axelrod's cooperation theory demonstrated that a mutual interest could grant access despite physical and theoretical barriers.

Access maintenance costs also revealed important aspects of each method. Projecting force, remaining ahead of peers, and maintaining the military dominance that both created and required economic growth, incurred significant costs. Britain successfully used compellence to gain access and then set out to change the nature of relationships between itself and its accessed population. In some instances, they were successful as was the case in Burma, Hong Kong, and Singapore where armed uprisings were relatively minor and short-lived.<sup>70</sup> In other instances, the

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<sup>69</sup> Eric Foner, *Reconstruction: America's Unfinished Revolution, 1863-1877* (New York: History Book Club, 2005), 220.

<sup>70</sup> Paul M. Kennedy, 180.



over-reliance on the Royal Navy limited Britain's adaptability to changes in the world. While Britain maintained more merchant and naval ships than all other European powers combined, it exposed vast portions of the Empire to attacks from land. By 1900, its colony in India, in particular, was at risk of intrusion from states using an expanding rail network.<sup>71</sup> Defending an extensive Empire distributed throughout the globe required far more than naval forces and seaport access.<sup>72</sup>

Credible force for compliance put great burdens on the British economy. Coercive efforts, both the compellence and deterrence required to achieve access, then maintain it, relied on force. Defense of India by sea power required more than 300,000 troops and placed considerable pressure on the recruit system, treasury, and supply network.<sup>73</sup> The British possessed both asymmetric levels of force and an asymmetric ability to project force magnified by specialized naval bases but lost opportunities to balance against the growth of land power. The force underwriting British compellence methods sent strategic messages throughout the globe but also incurred other burdensome responsibilities such as continental patrols, debt-collections in Latin-America, anti-piracy efforts, and protection of missionaries.<sup>74</sup> Given their naval dominance, power projection capabilities, and long-term commitments to territorial conquests, the British used compellence more than their forces could support.

The use of force also draws contenders. Throughout the history of the British Empire, if the sun never set upon it, a long-standing peace throughout the Empire never rose. While the British were able to move from compellence to sustain access to cooperation, there were constant examples of local skirmishes the British were involved with, or regional conflicts into which they were drawn. While compromise and cooperation strategies did exist throughout the history of the British Empire, the preponderance of examples fall into the compellence category.<sup>75</sup> The British used force or the threat of force often but it is also important to note, many regions that saw British occupation were largely lawless areas lacking strong, central governments. The British forged into uncontrolled areas and placed strict controls on them. In some circumstances,

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<sup>71</sup> Paul M. Kennedy, 181.

<sup>72</sup> Paul M. Kennedy, 197.

<sup>73</sup> Paul M. Kennedy, 197.

<sup>74</sup> Paul M. Kennedy, 181.

<sup>75</sup> Paul M. Kennedy, 196-204.

the British moderated regional behaviors by long-standing commitments to pacification and nation building.<sup>76</sup>

The spiral model suggests other reasons compellence incurs increasing costs. States learned from repeated defeats and adopted British innovations and practices in response to their overwhelming naval advantages. Adopting innovations and practices reduced disparities between the British and their adversaries and forced continuous British investment in new technologies in order to remain ahead of her competitors. In this sense, Britain paid the price for developing the technologies and her competitors adapted them without incurring any of the development costs or failures along the way. The continuous need to remain ahead of peers made the reliance on force costly.

If the use of force is costly, then transitioning away from force requires changes to relationships. Waltz and Simpson correctly warned that force's strategic messages also have second- and third-order effects that are difficult to predict and respond to correctly. The British pacification efforts were expensive and time-consuming. Erecting local governments, developing national infrastructure and economies, and providing security over and within their territory required unprecedented levels of commitment in both time and treasure. The principle of sunk cost helps explain why the British were often willing to increase their commitments in small increments to produce desired outcomes. The outlay of capital, time, and often the lives of British subjects required to carry out these policies, invited escalating commitments in the face of sunk costs. The British economy relied on a continuous flow of goods and raw materials which only further induced incremental costs. A cursory review of the literature did not expose any examples where the British turned away from access gained as expenses increased. Instead, they often re-doubled their efforts and built more merchant ships to offset cost. Eventually, maintaining these ships would also place a great burden on the British economy.

The terms of the incentive access methods satisfied both China and Pakistan. Pakistan was given capital and successfully boosted the economic value of an area otherwise undeveloped and isolated. China was able to secure access and improve protect of its oil imports in such a manner that caused little diplomatic concern within the US. Pakistan also has reasonable assurances that China, with its growing economy and growing need for hydrocarbons, will

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<sup>76</sup> Paul M. Kennedy, 187.

continue to develop infrastructure within and around the port of Gwadar. For the Chinese, much of the control accompanying compellence methods was worth neither the coercive efforts nor the long-term costs. Incentive access was more benign than the attention compellence might draw from US military forces already in Southwest Asia. While this is not problematic now, the Chinese may not be willing to walk away from their investment if relations deteriorate in the future. Although compromise methods do not require the levels of commitment (in blood and treasure) compellence methods do, these investments are not minimal and could bring the states into contention just the same.

Cooperation over Southern cotton during the US Civil War loosely followed Axelrod's prediction. Mutual interests created access where none previously exists, however, the volatility of cotton supplies from the South upset European merchants and led to development of cotton exports from other regions. The US would continue to lead the world in cotton exports until the mid-1930's but the conditions were largely set for other markets to surpass the US from 1861 to 1865. Nonetheless, during the US Civil War, cooperation made interactions predictable if no less risky. British and New England shipyards still sold fast steamships to Confederate clients for the purpose of blockade-running and new tactics were employed to defeat blockade efforts. With cotton prices exceeding 500% of pre-war levels, European and New England textile plants and Southern plantation owners went to extraordinary lengths to smuggle cotton. Soaring cotton prices, a lack of Southern cotton mills, and high demand confirmed future interactions and increased the efficiency of smuggling efforts.<sup>77</sup>

If cooperation demonstrated how mutual interests overcome significant barriers, then it exposed a weakness of cooperation methods – long-term commitment. Where compellence methods indicate high levels of commitment, cooperative methods indicate low levels of commitment once the foundation of cooperation has changed or no longer exists. European and New England cotton mills still received shipments of cotton after 1865 but the smuggling efforts had ended and cotton exports fell under the control of the federal government through men loyal to the Union.<sup>78</sup> The price of cotton also dramatically decreased to less than 12¢ and now carried the additional costs of paid laborers further cutting into profits.<sup>79</sup>

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<sup>77</sup> David L. Cohn, 209.

<sup>78</sup> Eric Foner, 57.

<sup>79</sup> David L. Cohn, 210.



In cases such as humanitarian assistance and disaster response efforts, cooperative access addresses short-term needs. A state able to provide assistance is quickly granted access to prevent unnecessary suffering or loss of life. Man-made and natural disasters provide a useful framework for explaining short-term access. Refugee crises, natural disasters, and immediate need for military support represent some just some of the reasons access is granted. Typically, these efforts focus on the local or regional populations who are negatively affected. Short-term cooperative access strategies are often the most benign and, when viewed in the totality of international institutions, represent the largest portion of successful access.

Access to markets and commerce create economic trade benefits for both states despite differing ideologies. As evidenced in the cooperative access case study, relationships changed the loyalty of Southern plantation owners. Following Union offers to ensure the transport of their cotton to New England factories, Southern plantation owners renounced their allegiance to the Confederacy.<sup>80</sup> Southern plantation owners loyal to the Union sent their cotton in legitimized and legal routes to New England factories. Not only did relationships create access methods with reduced maintenance costs, they created new allies where none openly existed. In the long-term, cooperative access strategies seek shared benefit from economic trade, mutual security, regional balancing or combinations of the three. More importantly, cooperative access strategies create allies at a lower cost than using force creates allies by submission.

Where cooperative strategies exist, the likelihood and importance of future interactions has a moderating effect on behavior and makes future interactions more predictable.<sup>81</sup> The relationships between the state seeking access and its host need not have traditional characteristics based on alliances or mutual security. As game theory reveals about economic choices, as interactions increase, cooperative strategies become the most mutually beneficial and can extend beyond alliances and security. Cooperative access to cotton suited the needs of both the growers and production centers. Consequently, the Europeans did not enter the US Civil War or take escalatory steps in order to safeguard access to cotton. Conversely, Chinese naval support to territorial claims within the “Nine-Dash Line” imply that incentive access is not always benign and could result in compellence methods thus changing the nature of previous relationships.

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<sup>80</sup> James T. Currie, 56-58.

<sup>81</sup> Robert M. Axelrod, 25, 110-113.

Cooperative access strategies can also have more legitimacy in the eyes of the international system than access strategies involving compellence and persuasion. Transnational and other threats posed by terrorism, insurgencies, and pirates create access options to address mutual security concerns. Balancing against belligerent states and the threats they pose to the current international system also creates access opportunities.



## CHAPTER 3

### **The Role of Airlift in the Indo-Pacific**

There may be several reasons why airlift aircraft serve a subordinate role in strategy execution. Following the description of contested environments and proliferating anti-access weapons, it is easy to think unarmed transport aircraft could not possibly present viable first options. As access is lost in the Indo-Pacific with the expansion of contested environments and territorial claims (loss of access for US naval assets, ground forces, and 5<sup>th</sup> generation aircraft), planners may become more sensitive to these risks. Kahneman describes high degrees of risk aversion in the face of potential loss as prospect theory.<sup>1</sup> This theory helps explain why people double-down on the next hand of cards following a loss. Their purposeful actions are intended to maximize gains. Prospect theory also explains why planners might use overwhelming force to restore access in face of potential loss. To them, the use of force offers a satisfactory level of control and immediacy when, in fact, the opposite may be true. Instead of describing the Indo-Pacific as an environment dominated by anti-access weapons and area denial efforts, but one of constant need with over-arching, trans-national concerns, a new set of solutions becomes evident. The next challenge is to understand the barriers to each access method.

In the previous sections, the international relations theories provided the basis for various relationships between states and the case studies showed how barriers within those relationships lead to various access methods used to gain a foothold. Furthermore, a discussion of the broad view of maintaining access, according to the three propositions, provided some insights on what relationships produce access with lower costs. This section brings to bear those hypotheses and matches them to means within the US Air Force to achieve the objective of access. If previous sections of this work offered propositions, set to explain them using various theories, and then showed evidence for them in case studies, then this section explains the role of airlift in access.

Two major challenges to the use of force in the Indo-Pacific is the level of readiness and additional personnel and equipment to conduct these operations – both are

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<sup>1</sup> Tversky, 273-275.

inadequate. Furthermore, preparing a military in this manner neglects alternatives currently available. If the overarching assessment of the Indo-Pacific includes opportunities on the periphery and securing a footing there is vital, then reconsidering the role of airlift is vital as well because it already has access to many of these areas.

Incentive and cooperative access options have two important characteristics. First, they offer lower cost alternatives to physical presence than compellence because these methods encounter less-costly barriers. Second, incentive and cooperative access reserve the ability to expand access and provide hubs that increase and magnify power projection. The US has already made countless initial access efforts in the Indo-Pacific. Opportunities to sustain this access have not followed. Speaking only in terms of humanitarian assistance or disaster response missions, the US has been slow to establish lasting physical presence after initial access. From the propositions and their case support, these access efforts offer the lowest cost of the three options. Instead of starting over each time when the next crisis occurs, the US should work to solidify its access in these states and establish mutually beneficial, long-term relationships.

Compellence, incentives, and cooperation describe different cost curves. They also represent a spectrum between control and commitment. Although the case studies do not provide data sufficient for a complete analysis, they do represent an initial phase of understanding the potential cost and benefit of different access methods. When viewed this way, the tradeoffs made for increased control from compellence are clear against the subsequent effects of commitment, risk, and cost. Each case study exhibits these effects and while each was successful at achieving its aim, proactive access warrants further analysis against the backdrop of the Indo-Pacific.

Incentive and cooperative access offer possible alternatives by using airlift as a bargaining tool or to confront domestic problems within the host state. The US has the largest airlift capacity in the world and in routine operations, airlift requires much of the same infrastructure as strike assets but without the overt signaling of positioning combat forces. Flying a cargo aircraft or heavy-lift helicopter in and out of a country does not send the same message as flying a strike aircraft does.

With each airfield US airlift aircraft transit, progress is made toward not only showing a US presence in that region but also seeds the embryonic development of a

more robust infrastructure to support a myriad of spectrums from economic development, to humanitarian assistance, and local government support, to the possibility of larger-scale operations conducted by US forces.

### **Airlift and Access**

The roles of the military and political authorities are keys to understanding civil-military relations in the Indo-Pacific.<sup>2</sup> In the Indo-Pacific, the role of military force is shifting as militaries in Taiwan and South Korea have disengaged from political activity almost entirely.<sup>3</sup> Authors writing in *Coercion and Governance* believe as more Asian countries come under civilian rule, the power of the military declines. Despite Burma, Pakistan and possibly North Korea as examples of military-led governments, the Indo-Pacific is transitioning away from military force and toward economic opportunities. The rise of civilian-led governments carries responsibilities to citizenry that also create opportunities for interaction. Civilian-led governments need support developing infrastructure and transitioning populations from rural to modern. Additionally, as survey respondents and authors writing for the Asian Pacific Center for Security Studies note, internal security concerns dominate this region.<sup>4</sup> While the three major areas of concern are terrorism, climate change, and infectious diseases, other areas of concern include transnational crime and resource scarcity.

Airlift magnifies the force projection of compellence in distinct ways. Where land forces lack rapid mobility to austere environments, especially over contested roads like those seen in Afghanistan and Iraq, airlift can transform a force held at risk to a mobile force. Airlift can restore lethality when stifled by a lack of mobility. Airlift also resupplies and augments fielded forces with follow-on forces to quickly spread a ground component's presence. Lastly, airlift can extend forces beyond the perimeter of a battle space. Where adversaries trade space for time, airlift covers ground quickly and permits

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<sup>2</sup> Muthiah Alagappa, ed., *Coercion and Governance: The Declining Political Role of the Military in Asia* (Stanford, Calif.: Stanford University Press, 2001), 3.

<sup>3</sup> Muthiah Alagappa, 3-5.

<sup>4</sup> For more information on Thailand, Indonesia, the Republic of Korea, India, Malaysia, Singapore, and Vietnam, see Muthiah Alagappa, ed., *Coercion and Governance*.

near-constant engagement of adversary forces. Rapid mobility, resupply, and near-constant engagement enhance influence operations.

As a bargaining tool, airlift provides an advantage that cannot be gained from partnering with any other state. Many states in the Indo-Pacific have significant, long-standing insurgencies. The advantages of airlift proliferate a host state's domestic influence. Airlift transforms a host state's desire to confront domestic concerns into action. If, as Mackinlay states, government security agencies struggle to find a model explaining the creation of insurgencies, then they also struggle to mobilize efforts to confront and defeat them.<sup>5</sup> Airlift extends the reach of government security agencies. Airlift alone cannot confront and defeat them – airpower alone cannot solve this problem. However, airlift extends the reach of law enforcement and security personnel to the remote and austere locations where insurgencies thrive.

In a survey coordinated by the Asian Pacific Center for Security Studies, over two hundred senior-level decision-makers in the civil and military sectors provided responses that listed transnational security challenges as the most prescient issues facing states in the South and South East Asia.<sup>6</sup> Northeast Asian states noted more traditional state-to-state issues while Southeast Asians recorded concerns with weapons and drug trafficking.<sup>7</sup> The combinations of internal and external pressures create destabilizing environments for regimes seeking legitimacy according to Miemie Winn Byrd, an Asian Pacific regional affairs expert.<sup>8</sup> Airlift extends local and national government authority and proliferates the control exercised by security agencies. While the document's intended purpose was to illuminate issues for policymakers to engage, the document also shows where airlift might be useful.

As a resource, airlift has demonstrated the ability to gain access to many states in the Indo-Pacific. Airlift employed in response to relief efforts in the aftermath of natural disasters produces unmatched results. Whether providing support to indigenous agencies

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<sup>5</sup> John Mackinlay, *Insurgent Archipelago* (S.I.: Oxford University Press, 2012), 203.

<sup>6</sup> *Issues for Engagement: Asian Perspectives On Transnational Security Challenges*. (Honolulu, Hawaii: Asia-Pacific Center for Security Studies, 2010), 14-18.

<sup>7</sup> *Issues for Engagement*, 16.

<sup>8</sup> Miemie Winn Byrd, "The Perfect Storm? Thailand's Security Predicament" in *Issues for Engagement: Asian Perspectives On Transnational Security Challenges* (Honolulu, Hawaii: Asia-Pacific Center For Security Studies, 2010), 35.

or supporting US personnel in relief efforts, airlift facilitates the rapid deployment of supplies and materiel supporting humanitarian assistance and disaster response efforts. Airlift is currently spreading influence as a resource in cooperative access methods. In areas cutoff from overland transit, airlift and airdrop can resupply remote outposts in areas cutoff by disaster. Airlift improves limited relief efforts with greater reach and flexibility.

Airlift also magnifies relief efforts and stabilizes disaster areas by quickly providing food or medical supplies. US airlift assets with large cargo capacities and heavy lift capabilities have the ability to quickly mass supplies where none previously existed. This capability is particular noted in the Indo-Pacific region where, on average, a natural disaster occurs a little more than once every month.<sup>9</sup> As the US's chosen instrument of aeromedical evacuation, humanitarian assistance, and disaster response, airlift saves lives.

Airfields for follow-on operations exist on a spectrum. According to Air Force descriptions, there are five different types of expeditionary airfields categorized along an increasing scale of complexity and infrastructure.<sup>10</sup> Airlift is the essential element within the transformation of these airfields from forward operating locations (the simplest category of airfield) to main operating bases (the most complex). While supplies and infrastructure improvements can also arrive by other means, airlift is the fastest and frequently, the most desired as shown in the build-up of bases in Iraq and Afghanistan since 2002.

While airlift does not represent solutions for all access problems, without airlift, access becomes increasingly difficult. While all of the five various types of expeditionary airfields rely on airlift, none would be effective without it. The US is capable of supporting partner states in ways no other state can through airlift. Although the bargaining value of airlift holds promise granting competitive advantages to other states and offering unique capabilities, it is still separate from traditional images of airpower.

In a theoretical example, cargo aircraft and heavy lift helicopters can transform a forward operating location to a warm base – a prepositioned location where infrastructure

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<sup>9</sup> National Oceanic and Atmospheric Administration's National Geophysical Data Center.

<sup>10</sup> Air Force Pamphlet 10-219 Vol. 6, 14.



development and initial assets support rapid deployment – to a main operating base within days and hours. Airlift can also serve as a bargaining tool offering a competitive advantage to partner states or provide services in the crises-prone Indo-Pacific. Since airlift provides capabilities vital to compellence access methods, competitive advantages to partner states in negotiation access methods, and saves lives in cooperative access methods, then airlift supports access efforts.

The evolution of warfare demands rapid transport and agile logistics and the dynamic geopolitical environment demands nothing less as well. Because airlift has a presence meeting the demands of political leadership to supply prompt responses to internal and external pressures, then non-kinetic capabilities should represent the first alternative to access rather than the use of kinetic force. Airlift represents a resource states seek and, in turn, facilitates US access. Furthermore, airlift aircraft enjoy a special form of access not afforded to strike or remotely piloted aircraft. Simply states, airlift aircraft routinely arrive and depart from Chinese cities without incident. Their innocuous nature provides mobility to areas where strike aircraft cannot transit.

Traditionally, airlift serves a supporting function to combat forces. Although airlift supports each of these access methods, the most benign, unthreatening and least escalatory method are compromise and cooperation. There is reason to believe this type of access, not the overt use of force, would ameliorate regional states' desires to counter Chinese expansion in the Indo-Pacific. An article published in *The Diplomat* echoes this sentiment. Stephen Ellis argued a US presence in the Pacific reduces the defense concerns of Japan. Without the US, an unrestrained China would threaten Japanese security and, Ellis argues, spiral into an arms race.<sup>11</sup> Despite the article's concentration on the Pacific, the same concerns exist throughout the broader Indo-Pacific region.

The combined fiscal pressures facing the US, the fragile geopolitical environment in the Indo-Pacific, and the unique capabilities of airlift aircraft require different views on the future of this component of airpower. Noting the difficulty of resourcing the needs of commanders in the Indo-Pacific, Katrina McFarland, the assistant secretary of defense for acquisition, said "right now, the pivot is being looked at again, because candidly it can't

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<sup>11</sup> Stephen Ellis, "How U.S. Military Power Benefits China" (*The Diplomat*: Features: Security: East Asia, March 13, 2014).



happen.”<sup>12</sup> Shortly after saying this, McFarland backtracked her statement through a spokesperson saying, “the rebalance to Asia can and will continue.”<sup>13</sup> Despite continued focus on the pivot, budget constraints and personnel drawdowns are still barriers to commanders’ requests for additional support and resources. Amidst the new constraints of US international politics, the US must still influence and shape this region.

The means of access can send very important messages to the international community belying the intent of the type of influence desired. From British seaports, to paying for access, and requests for humanitarian assistance, the means of access is tied to the influence achieved. US airlift aircraft flying personnel and materiel into and out of Indo-Pacific states not only displays US presence in those places, it supports allies in a way no other state can. Airlift support for allies can foster further cooperation across economic, diplomatic and other arenas. Cooperation with the US in this manner can represent an alternative to partnerships with China.

Economic considerations explain why British wanted access to seaports across the globe. The same holds true for Chinese access to Gwadar and Southern cotton-growers access to European New England markets during the US Civil War. In each case, national economies determined the appropriate level of access in the geopolitical environment associated with each case. According to the systems change theory offered by Robert Gilpin in *War and Change in World Politics*, the primary cause for war and changes in the international system are economic disparities that lead to the decline of one state and the rise of another.<sup>14</sup> If this is true, then the states influencing global economies through access are likely to create changes in the international system and even wars.

The US must seize opportunities to foster relationships where access already exists. Instead of leaving after disaster relief efforts are no longer required, the US should sustain this access with long-term programs designed around the next event or series of disasters. Developing infrastructure in forward locations improves response time that saves lives and allows a state to rebound from disasters quicker. Routine stops throughout these locations magnifies US presence in the Indo-Pacific, demonstrates commitment to

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<sup>12</sup> Stephanie Gaskell, “Can the U.S. Military Really ‘Pivot’ to Asia?”

<sup>13</sup> Stephanie Gaskell, “Can the U.S. Military Really ‘Pivot’ to Asia?”

<sup>14</sup> Robert Gilpin, 29-35.

regional states, and builds infrastructure that accommodates a greater diversity of operations. In this regard, using a military capability intended to support combat activities opens access with states during peacetime.

The rise of Indo-Pacific hegemons presents challenges to the US. As a testament to its desire to assert itself against China, India has become the largest importer of US military equipment and launched its first domestic-build aircraft carrier.<sup>15</sup> If the US AirSea Battle and Joint Operational Access Concepts reflect efforts to avoid potential loss of access using overwhelming force, then strengthening India's blue-water navy may been seen in the same light. As the Indo-Pacific becomes an arena for two rising hegemons to compete, the US must focus on relationships that influence a peaceful rise and protect. According to former Prime Minister of Singapore, Lee Kuan Yew, "no major issue concerning international peace and stability can be resolved without US leadership, and no country or grouping can yet replace America as the dominate global power."<sup>16</sup>

Schelling offers insight into how hegemons can better influence international relations outcomes. Schelling presented bargaining theory as a way to understand these interactions. According to his theory, bargaining is primarily driven by expectations of what the other will accept.<sup>17</sup> States with greater capabilities can offer greater competitive advantages and, therefore have greater bargaining power. Furthermore, the offer must have credibility and be easily understood. The US is uniquely positioned to offer a service no other world power can in exchange for access through the competitive advantage of airlift capabilities.

Incentives and cooperation access methods may hold promise in addressing regional concerns and adding action to soft power. Unlike compellence methods that, among other things, challenge sovereignty and the legitimacy of governments, incentives and cooperation can also be forms of soft power tools. According to Joseph Nye, soft power is the "second face of power", an alternative to the commonly used instruments of

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<sup>15</sup> Christopher Bellamy. "Naval Power: Strategic Relevance in the 21st Century" (Jane's Navy International December 2, 2013).

<sup>16</sup> Lee Kuan Yew, et al., 20-21.

<sup>17</sup> Thomas C. Schelling, *The Strategy of Conflict*, 21.

power that rest on stimuli or threats.<sup>18</sup> Soft power encourages “buy-in” from other states – getting others to want the shared outcomes the US wants.<sup>19</sup> By co-opting states rather than coercing them, the soft power “rests on the ability to shape the preferences of others.”<sup>20</sup> Soft power, according to Nye, attracts other states by representing ideals, emulating examples, and typifying prosperity and openness. Negotiation and cooperation can offer tangible support where soft power alone may be insufficient.

If many states in the Indo-Pacific seek to legitimize their own political power by solving (at least in part) the internal security concerns, then incentives and cooperation could accomplish two goals. First, they offer US resources to help address these concerns to promote regional stability. Secondly, these efforts balance China and, as Stephen Ellis suggested, help address regional rivalries that could lead to conflicts that are more serious. Ellis wrote that US military power in the Indo-Pacific assuages security concerns within Japan.

If in the future China was to somehow succeed in driving the United States militarily out of East Asia, Tokyo would likely respond to diminishing U.S. regional power by significantly bolstering its own conventional military capabilities. For China, this would be something of a pyrrhic victory, as Beijing would have only succeeded in replacing the U.S. presence with growing Japanese military power, something China would likely view as a much more significant threat. Thus, pushing the United States militarily out of the East Asia may prove to be of questionable value to Beijing and could even worsen China’s strategic position with regard to Japan.

Given this, Beijing may instead look to continue to rise and operate within the existing regional framework built and maintained by the deployment of significant U.S. military power, which has so far

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<sup>18</sup> Joseph S. Nye, *Soft Power: The Means to Success in World Politics* (New York: Public Affairs, 2004), 5.

<sup>19</sup> Joseph S. Nye, 5.

<sup>20</sup> Joseph S. Nye, 5-8.

proved highly effective at limiting Japan's conventional military capabilities and aspirations.<sup>21</sup>

For example, cooperative access methods may work best during conflict whereas incentive methods may work best during relative peace. Compellence access methods may reduce the chances of failing to gain access but could also be the most expensive and destabilizing. Incentive methods run the risk of changes in political environments and outside actors interfering in agreements between states. Cooperation methods may be the least expensive but can also be argued to have the smallest amount of political will attached to them. Furthermore, cooperative access methods may not demonstrate the commitment that compellence and incentive methods do. If incentives makes strange bedfellows, then relations between Iran and India, or Pakistan and China make it unclear what any morning-after realizations mean to the future of such access. From the Gwadar case study, those outside the negotiations have direct impact on their success. Furthermore, states negotiating must contain or control these outside forces if incentives are to pay off.

US military presence in the Indo-Pacific provides assistance and assurances. The US can position its military resources to assist Indo-Pacific governments in counterterrorism, and combating climate change and infectious diseases. Territorial disputes in the South China Sea, Indo-Sino ideological conflicts, and future energy and economic opportunities suggest the assurances of US military balancing power are still important. Any US military presence risks creating security dilemmas and spiraling build-ups of adversarial forces. Tight rope walking in this area must consider how much airlift operations can encroach on Chinese areas of concern without a response and subsequent escalation. Nonetheless, every arrival and departure in the Indo-Pacific brings both the familiarity to operate in this region and the strategic message of commitment to regional partners.

The primary critique, while discussing this topic amongst peers and joint service officers, is the inability for airlift aircraft to operate in contested environments. This critique assumes a contested environment throughout the entire Indo-Pacific. The critique

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<sup>21</sup> Stephen Ellis, "How U.S. Military Power Benefits China."

falls short because there are numerous states where the US enjoys uncontested access. Critics of an airlift first option have not been able to separate the role of mobility and airlift aircraft in AirSea Battle from their nature and core competencies. If mobility forces and airlift have a role in AirSea Battle, then that role is to ensure AirSea Battle does not take place by using the unique advantages of airlift to provide sovereign alternatives to the use of kinetic force.



## CHAPTER 4

### Conclusion

*“The mission of the United States Air Force is to deliver sovereign options for the defense of the United States of America and its global interest...”*

- Michael W. Wynne, Secretary of the Air Force<sup>1</sup>

Physical presence creates effects that virtual or diplomatic relations do not. There is an important relationship between physical presence and successfully achieving effects. With a clearer understanding of the methods of gaining access, combined with an elevated understanding of the use of airlift, it is clear that future strategists would be remiss not to use airlift in a more evolved manner. When the President announced intentions to rebalance forces toward the Pacific in response to Asia’s growing economic power, trade opportunities, and escalating rhetoric in a region marked by the presence of five states with nuclear weapons, the military responded. Airlift plays a role in these rebalancing efforts.

The AirSea Battle Plan created by the Joint Operational Access Concept greatly influenced dialogue and thoughts on access in contested environments. Traditional thoughts on airpower’s role in supporting Joint Operations framed the kinetic response of airpower. Accordingly, planning immediately focused on the kinetic effects of military force to prepare for attrition warfare. As the concept matured and forces were theoretically postured to support AirSea Battle, it soon became clear neither the precision strike capability, nor the logistical support, nor the fiscal limitations of a drawdown could support such a plan. Nonetheless, physical access is still vital in the Indo-Pacific if the US is to shape and lead in the international order.

If AirLand Battle was designed to *confront* an adversary, then AirSea Battle was designed to *create* one. For its place in AirSea Battle, airpower serves traditional roles in a predictable manner - seeking to overcome an adversary’s unknown capabilities in a war of attrition for access and influence. Unlike AirLand Battle employed against an adversary

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<sup>1</sup>,Michael W. Wynne, “Sovereign Options: Securing Global Stability and Prosperity”, *Strategic Studies Quarterly* 1st Qtr, 2008 (Air University). i.

employing military force in various places on the globe, AirSea Battle developed in response to a potential adversary largely using economic power, not its military force. Nonetheless, AirSea Battle's concept inappropriately frames much of the thought on access in the Indo-Pacific. Instead of airpower used to gain access through attrition, the US should consider an alternative – using its most asymmetric form of airpower for securing access. The US has the largest airlift capability and capacity in the world. It should think of ways to leverage this and bargain for access in addition to crisis response efforts.

Case studies demonstrated three different methods to gain access: compellence, incentive, and cooperation. From the propositions brought forth through the case studies, each access method has associated costs to maintain that access over time. Unless the relationship between the two states changes, the maintenance costs will remain the same. Extrapolating these access methods to the Indo-Pacific, the US faces several critical decisions as regards the type of relationships it wishes to cultivate. Understanding the long-term impacts of various access methods and the available tools within the Department of Defense reveals a potential option for airpower to influence this region in ways that do not incur unpredictable and rising costs.

Airlift supports compellence, incentive, and cooperation access methods. Reactively, airlift supports compellence access methods by positioning and resupplying forward forces. This section demonstrates how airlift supports incentive and cooperation methods. Proactively, airlift presents US decision-makers with sovereign options to influence the relationships necessary to strengthen the defense of the US and its global interests. Non-kinetic airpower, used proactively in the form of airlift, presents options for building complementary relationships with Indo-Pacific states.

Alternative access methods developed for national security objectives must not undermine the Indo-Pacific's fragile stability. The US has the largest airlift capability in the world with aircraft that can freely transit areas where strike aircraft cannot. Additionally, airlift plays a vital role in the most destructive force currently seen in the area – natural disasters. US airlift supports access methods in the Indo-Pacific to fulfill national security objectives while not undermining regional stability.

The methods employed matter as much as the access gained in the Indo-Pacific. Of the three access methods, incentive and cooperative methods carry less risk of unpredictable responses than the use of force and lower access maintenance costs. While the British



successfully used compellence methods, the case study suggests a need for long-term strategy for control both over *and* within the territory. Compromise and cooperation methods can lead to long-term commitments as well but under vastly different conditions than compellence methods. Cooperative bargaining and negotiation play key roles in determining the level and cost of this access. Where force generates a less predictable response to coercive pressures, bargaining and negotiation reduce risk and have legitimizing effects on access.

In many ways, airlift aircraft are already establishing access to strategically important locations throughout the Indo-Pacific. The lack of a codified approach for airlift-led access methods in this region risks losing the vital gains already made. By looking at airpower in an alternative manner, outside its traditional kinetic roles and considering the bargaining power of one of the US's most asymmetric advantages, additional alternatives to attrition warfare may produce the access required without risking war in a region where force is neither wanted nor sought.

US decision-makers should consider leveraging the unique capabilities of airlift for access during a domestic defense environment that continues to see shortages in equipment and follow-on force preparedness to support the AirSea Battle concept. While it is unlikely airlift alone can produce the degree of access large-scale Joint Operations may produce, in the interim, airlift can turn access into executable alternatives. Many of the basing requirements to support partner states during times of natural disaster response and humanitarian assistance also support other US efforts.

Airlift operations have strategic messaging value, and are unlikely to engender immediate responses with force. Furthermore, airlift operations offer assurances to partner-states while gaining operational familiarity within the region. The same tenets of airpower apply to airlift aircraft. Rapid concentration of mass and effects with quick dispersion make airlift a potential alternative in a region characterized by vast expanses of water and territorial disputes. Given the regional power dynamics, US presence in the Indo-Pacific is also likely to ameliorate Japanese and Indian concerns over an unchecked China. In this regard, US presence offers balancing options for regional states and provides alternatives to Chinese dominance.

As China and India establish seaports on the Indian Ocean in close proximity to the Arabian Gulf and Straits of Hormuz, the geopolitical environment is changing. The US must leverage its vast airlift capability to create options that traditional military forces are currently

unable to provide. The purpose of this thesis has been to shed light on the conditions surrounding access and demonstrate airlift's ability to support access efforts. The three cases presented in this thesis do not provide enough data to permit a complete analysis. Instead, this cursory look at access and airlift offer insights against a backdrop of access methods to consider. This thesis extends and expands the discussion of access and the traditional images of airpower.

## **Summary of Findings**

The case studies demonstrate successful examples of access using either one, or a combination of three methods. More importantly, three major conditions also emerge from the case studies. First, compellence requires specialized support and in the examples of British seaports and naval facilities, long-term commitment. The long-term commitment places this method of access in a high-cost category relative to other methods. Secondly, incentives require successfully negotiating a better set of circumstances. However, these circumstances require continuous effort to maintain. While the cost of incentive access is dramatically less than continuously exerting force, maintaining incentive access is hardly free. Lastly, the unique attributes of a resource can create avenues to access where none previously existed. Creating access through cooperation reduced the costs of maintaining access significantly.

The case studies suggested several key concepts with potential applicability to future access methods. First, compellence access methods relied on a highly specialized network of logistics staging areas. These areas – seaports – enable force projection capability but also require continuous protection and defense against adversaries unless the relationship changes. Next, incentive access relies on successful negotiation and bargaining. The key concept for negotiation is a cost to benefits comparison. The access gained by the Chinese in the port of Gwadar secured access they would have been unable to achieve elsewhere. Maintaining access did not exceed the benefits gained from securing access to its primary hydrocarbon source. Lastly, the case study of the market access for cotton during the Civil War demonstrated that a highly coveted resource could create robust access opportunities where none previously existed. Furthermore, once tolerable demand levels of cotton were met, access was not expanded and force was never seriously considered.

Each access method carries implications. While force is typically thought of as a catalyst for peripheral actors to engage, incentive and cooperative access can also incite other states. Of

note, China's access to the Indian Ocean has had negative effects on India causing an upward spiral in military force. Today, India is balancing against China with domestic and imported weapons technology. Although China's access to the Indian Ocean is benign, historic mistrust between India and China creates a security dilemma and risks spiraling into a larger arms race.

The presence of a rising regional hegemon characterized the periods surrounding the case studies. During the 18<sup>th</sup> and 19<sup>th</sup> centuries, many European states in addition to the US were establishing themselves. The beginning of the 19<sup>th</sup> century saw the powerful rise of the US in the international system. In the 21<sup>st</sup> century, the resurgence of China and the rise of India represent hegemonic movements. Rising hegemonies interpret state actions and look for ways to shape the international system. Strong states sought access to exert influence while weaker states and those in decline withdrew from such endeavors. This suggests that economically strong states could position themselves to exploit access to their advantage. As an economically strong state, the US must not pass up opportunities for access lest another state seize the opportunity.

### **Principal Conclusion Restated**

In the Indo-Pacific, access based on the kinetic use of force can destabilize and undermine peaceful US intentions. The Department of Defense's Joint Operational Access Concept and the US Army, Navy and Air Force concepts all foresee attrition-based warfare as likely. The AirSea Battle concept derived for the US's most dangerous manner of conflict, however improbable, fails to take advantage of the largest and most asymmetric component of strategic airpower. Given the obvious challenges with attrition-based warfare, the US must seek alternatives to gain access in the Indo-Pacific.

Airlift supports US efforts to gain access. Airlift supports compellence, compromise, and cooperation access methods. More importantly, the ability of airlift aircraft to freely transit national airspace that would otherwise react with hostility to strike aircraft gives airlift a unique advantage. Additionally, the most frequent and likely scenarios to bring disparate states together in the Indo-Pacific is a scenario where airlift operations provide intangible benefits – during times of humanitarian assistance and natural disaster. Airlift can represent viable access alternatives during a period of defense cuts and overseas base closing.

## Implication of the Study

If operating familiarity and strategic messaging balance Chinese influence in the Indo-Pacific, then airlift has a role to play in access efforts. While uncertainty exists regarding the degree and location of US assistance and assurance in the Indo-Pacific through non-kinetic means what is certain, kinetic operations – fighting through anti-access and area denial efforts – intensifies the security dilemma and risks retaliatory responses. These responses quickly spiral beyond prediction and have the potential to ignite historic grievances in nearby states. Where kinetic operations are complex and unpredictable, non-kinetic operations carry less risk and have the inherent benefit of rapid concentration and dispersion.

Airlift is most often used as a supporting asset for troop movements or to support forward forces. On its own, airlift does present potential partners with options they cannot secure from any other state. Airlift can also present strategic access options with far less risk than formations of strike aircraft meeting adversaries at the merge using force to achieve access. Most importantly and primary above all other implications, the type of force produced from the AirSea Battle concept is completely counterproductive to the relationship the US seeks with China.

If airpower is to play a role in the Indo-Pacific, a paradigm change must occur. Airlift has performed brilliantly throughout the last 13 years of conflict. The reliability and resiliency of the airframes make them ideal in the austere environments of the Indo-Pacific. The next step is a codified approach that positions airlift assets in the Indo-Pacific on a routine basis.

Accomplishing nothing more than a refueling stop in transit to other locations, a priority should be placed on using airlift to establish a “new *normal*” for US operations in the Indo-Pacific. Airlift supports US efforts to gain access in ways that do not undermine or further threaten US national security objectives. Therefore, consideration must be given to increasing the presence of airlift in the Indo-Pacific and attracting potential regional partners to shape and influence behaviors. The implications of failing to use every competitive advantage for influence the US has while continuing to stabilize the Indo-Pacific risks seeing the rise of another hegemon at the US’s expense. As a thought experiment, picture the first days of a conflict with China, and then decide whether airlift operations for access do not merit further discussion.

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